

SAFETY DATA SHEET

BioOcean[®] Human IGFBP-3 ELISA Kit

Section 1. Identification

GHS product identifier Code: BioOcean® Human IGFBP-3 ELISA Kit, EK1168 Other means of identification: Not available Trade name: Human IGFBP-3 ELISA Kit Supplier/Manufacturer 3550 Lexington Ave, Suite 203, Shoreview, Minnesota 55126 In case of emergency: Bio-Ocean: 1-800-852-7601

Section 2. Hazards identification

OSHA/HCS status:	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	employees and other users of this product. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	BioOcean [®] Stop Solution	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture:	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not classified.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not classified.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate	Not classified.
	Reagent BioOcean [®] Stop Solution	Not classified.
GHS label elements		
Signal word	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	No signal word.
	BioOcean® Human IGFBP-3 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No signal word. No signal word.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No signal word.
	BioOcean [®] Stop Solution	No signal word.
Hazard statements	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	No known significant effects or critical hazards.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No known significant effects or critical hazards.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	No known significant effects or critical hazards. No known significant effects or critical hazards.
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Precautionary statements General	BioOcean® anti-Human IGFBP-3 detect antibodγ(100X)	Not applicable.
General	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not applicable.



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	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean® Stop Solution	Not applicable.
Prevention	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Not applicable.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean [®] Stop Solution	Not applicable.
Response	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not applicable.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean [®] Stop Solution	Not applicable.
Storage	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not applicable.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean [®] Stop Solution	Not applicable.
Disposal	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Not applicable.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not applicable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	BioOcean [®] Stop Solution	Not applicable.
Supplemental label elements	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	None known.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	None known.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	None known.
	BioOcean [®] Stop Solution	None known.
Hazards not otherwise classified	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	None known.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	None known.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate	None known.
	Reagent BioOcean [®] Stop Solution	None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture	_	
Ingredient name	%	CAS number
BioOcean [®] Human IGFBP-3 Standard	99.9-100	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

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Description of necessary first aid	measures	
Eye contact	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.
	BioOcean [®] Stop Solution	Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	BioOcean® anti-Human IGFBP-3 detect antibody(100X) BioOcean® Human IGFBP-3 Standard (lyophilized)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable
		for breathing. Get medical attention if symptoms occur.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate	Remove victim to fresh air and keep at rest in a position comfortable
	Reagent BioOcean® Stop Solution	for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	BioOcean [®] PBS Buffer with Tween 20 (Assay,	Flush contaminated skin with plenty of water. Remove contaminated
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate	clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated
	Reagent BioOcean [®] Stop Solution	clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by
	BioOcean® Human IGFBP-3 Standard (lyophilized)	medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do act induce unmitting unloss districts to do a to be
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by
	BioOcean [®] Stop Solution	medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/effects	s, acute and delayed Potential acute hea	
Eye contact	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	No known significant effects or critical hazards.
	BioOcean® Human IGFBP-3 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay,	No known significant effects or critical hazards. No known significant effects or critical hazards.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate	No known significant effects or critical hazards.
	Reagent BioOcean® Stop Solution	No known significant effects or critical hazards.
Inhalation	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	No known significant effects or critical hazards.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	No known significant effects or critical hazards.



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	BioOcean® PBS Buffer with Tween 20 (Assay,	No known significant effects or critical hazards.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate	No known significant effects or critical hazards.
	Reagent BioOcean® Stop Solution	No known significant effects or critical hazards.
Skin contact	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	No known significant effects or critical hazards.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	No known significant effects or critical hazards.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No known significant effects or critical hazards.
	BioOcean [®] Stop Solution	No known significant effects or critical hazards.
Ingestion	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	No known significant effects or critical hazards.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No known significant effects or critical hazards.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No known significant effects or critical hazards.
	BioOcean [®] Stop Solution	No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	No specific data.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No specific data.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean [®] Stop Solution	No specific data.
Inhalation	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	No specific data.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No specific data.
	BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean [®] Stop Solution	No specific data.
Skin contact	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	No specific data.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	No specific data.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean [®] Stop Solution	No specific data.
Ingestion	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	No specific data.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No specific data.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean [®] Stop Solution	No specific data.
Indication of immediate medical	attention and special treatment needed	if necessary, see toxicological information (Se

Indication of immediate medical attention and special treatment needed, if necessary, see toxicological information (Section 11)

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Use an extinguishing agent suitable for the surrounding fire.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Use an extinguishing agent suitable for the surrounding fire.



	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	A BETTER APPROACH FOR BIOLOGICAL RESEARCH Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	BioOcean® anti-Human IGFBP-3 detect	None known.
	antibody(100X) BioOcean® Human IGFBP-3 Standard (lyophilized)	None known.
	BioOcean [®] PBS Buffer with Tween 20 (Assay,	None known.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate	None known.
	Reagent BioOcean [®] Stop Solution	None known.
Specific hazards arising from the chemical	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	In a fire or if heated, a pressure increase will occur and the container may burst.
	BioOcean [®] Stop Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	No specific data.
Provide Provid	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No specific data.
	BioOcean® PBS Buffer with Tween 20 (Assay,	No specific data.
	Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean [®] Stop Solution	No specific data.
Special protective actions for fire-fighters	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	BioOcean [®] Stop Solution	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	BioOcean [®] Stop Solution	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
		operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".



Environmental precautions

A BETTER APPROACH FOR BIOLOGICAL RESEARCH Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for cont	ainment and cleaning up
Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling Protective measures	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
	BioOcean® Human IGFBP-3 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	BioOcean [®] Stop Solution	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage including any incompatibilities	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containement to avoid environmental contamination. Store in accordance with local regulations. Store in
	BioOcean® Human IGFBP-3 Standard (lyophilized)	original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use.



BioOcean[®] Streptavidin-HRP (100x) and Substrate Reagent

BioOcean[®] Stop Solution

A BETTER APPROACH FOR BIOLOGICAL RESEARCH Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,

Section 8. Exposure controls/personal protection

Control parameters Occupational exposure limits

None

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side- shields.
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Liquid.
	BioOcean® Human IGFBP-3 Standard (Iyophilized)	Solid
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Liquid.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Liquid.
	BioOcean [®] Stop Solution	Liquid.
Color	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.



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	BioOcean® Human IGFBP-3 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Odor	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Flash point	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean® Human IGFBP-3 Standard (Iyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Auto-ignition temperature	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean® Human IGFBP-3 Standard (Iyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Flammable limits	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean® Human IGFBP-3 Standard (Iyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Molecular weight	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean® Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Molecular formula	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean® Human IGFBP-3 Standard (Iyophilized)	Not available.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
рН	BioOcean [®] anti-Human IGFBP-3 detect	7.0-7.2
	antibody(100X) BioOcean® Human IGFBP-3 Standard (lyophilized)	Not available
	(iyopnilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	7.0-7.2
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	7.0-7.2
	BioOcean [®] Stop Solution	1.1-1.3



			A BETTER APPROACH FOR BIOLOGICA
Boi	iling/condensation point	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
		BioOcean [®] Human IGFBP-3 Standard	Not available.
		(lyophilized) BioOcean [®] PBS Buffer with Tween 20 (Assay,	Not available.
		Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and	Not available.
		Substrate Reagent BioOcean [®] Stop Solution	Not available.
Me	elting/freezing point	BioOcean [®] anti-Human IGFBP-3 detect	Not available.
		antibody(100X) BioOcean® Human IGFBP-3 Standard	Not available.
		(lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
		Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and	Not available.
		Substrate Reagent BioOcean [®] Stop Solution	Not available.
Re	ative density	BioOcean [®] anti-Human IGFBP-3 detect	Not available.
	,	antibody(100X) BioOcean® Human IGFBP-3 Standard	Not available.
		(lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
		Diluent or Washing buffer)	Not available.
		BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	
		BioOcean [®] Stop Solution	Not available.
Vaj	por pressure	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
		BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not available.
		BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
		BioOcean [®] Streptavidin-HRP (100x) and	Not available.
		Substrate Reagent BioOcean [®] Stop Solution	Not available.
Vaj	por density	BioOcean [®] anti-Human IGFBP-3 detect	Not available.
		antibody(100X) BioOcean® Human IGFBP-3 Standard	Not available.
		(lyophilized) BioOcean [®] PBS Buffer with Tween 20 (Assay,	Not available.
		Diluent or Washing buffer) BioOcean [®] Streptavidin-HRP (100x) and	Not available.
		Substrate Reagent BioOcean [®] Stop Solution	Not available.
Vo	latility	BioOcean [®] anti-Human IGFBP-3 detect	Not available.
	,	antibody(100X) BioOcean® Human IGFBP-3 Standard	Not available.
		(lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay,	Not available.
		Diluent or Washing buffer) BioOcean [®] Streptavidin-HRP (100x) and	Not available.
		Substrate Reagent BioOcean [®] Stop Solution	Not available.
Eva	aporation rate	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
		BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Not available.
		BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
		BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
		BioOcean [®] Stop Solution	Not available.
Vis	cosity	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Not available.
		BioOcean® Human IGFBP-3 Standard (lyophilized)	Not available.
		BioOcean [®] PBS Buffer with Tween 20 (Assay,	Not available.
		Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and	Not available.
		Substrate Reagent	



	BioOcean [®] Stop Solution	Not available.
Solubility	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean [®] Human IGFBP-3 Standard (Iyophilized)	Not available.
	BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.
Physical/chemical properties comments	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Not available.
	BioOcean [®] Human IGFBP-3 Standard (Iyophilized)	Not available.
	BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	BioOcean [®] Stop Solution	Not available.

Section 10. Stability and reactivity

Section 10. Stability and rea	Clivicy	
Reactivity	BioOcean® anti-Human IGFBP-3 detect antibody(100X) BioOcean® Human IGFBP-3 Standard (lyophilized) BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Reagent BioOcean® Stop Solution	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	The product is stable.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	The product is stable.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	The product is stable.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	The product is stable.
	BioOcean [®] Stop Solution	The product is stable.
Possibility of hazardous reactions	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	BioOcean® Human IGFBP-3 Standard (lyophilized)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	BioOcean [®] Stop Solution	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	BioOcean [®] anti-Human IGFBP-3 detect antibody(100X)	No specific data.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	No specific data.
	BioOcean [®] PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	BioOcean [®] Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	BioOcean [®] Stop Solution	No specific data.
Incompatible materials	BioOcean [®] anti-Human IGFBP-3 detect	No specific data.
	antibody(100X)	



BioOcean [®] Human IGFBP-3 Standard (Iyophilized)	No specific data.
BioOcean [®] PBS Buffer with Tween 20 (Assay,	No specific data.
Diluent or Washing buffer)	
BioOcean [®] Streptavidin-HRP (100x) and	No specific data.
Substrate Reagent	
BioOcean [®] Stop Solution	No specific data.

Hazardous decomposition products	BioOcean® anti-Human IGFBP-3 detect antibody(100X)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	BioOcean [®] Human IGFBP-3 Standard (lyophilized)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	BioOcean [®] Streptavidin-HRP (100x) and	Under normal conditions of storage and use, hazardous
	Substrate Reagent	decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	BioOcean [®] Stop Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects Acute toxicity: Not available. Irritation/Corrosion: Not available. Sensitization: Not available. Mutagenicity: Not available. Carcinogenicity: Not available. Reproductive toxicity: Not available. Teratogenicity: Not available. Specific target organ toxicity (single exposure): Not available. Specific target organ toxicity (repeated exposure): Not available. Aspiration hazard: Not available. Information on the likely routes of exposure: Not available.

Potential acute health effects

Eye contact: Not available. Inhalation: Not available. Skin contact: Not available. Ingestion: Not available.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Not available. Inhalation: Not available. Skin contact: Not available. Ingestion: Not available.

Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure: Not available. Potential immediate effects: Not available. Potential delayed effects: Not available. Long term exposure: Not available. Potential immediate effects: Not available. Potential delayed effects: Not available. Potential chronic health effects: General: Not available. Carcinogenicity: Not available. Mutagenicity: Not available.



Teratogenicity: Not available. Developmental effects: Not available. Fertility effects: Not available. Numerical measures of toxicity Acute toxicity estimates: Not available. Interactive effects: Not available. Other information: Not available. Section 12. Ecological information Toxicity: Not available. Persistence and degradability: Not available. Bioaccumulative potential: Not available. Mobility in soil Soil/water partition: coefficient (Koc) BioOcean® anti-Human IGFBP-3 detect antibody(100X) Not available. BioOcean® Human IGFBP-3 Standard (Ivophilized) Not available BioOcean® PBS Buffer with Tween 20 (Assay, Diluent or Not available Washing buffer) BioOcean® Streptavidin-HRP (100x) and Substrate Not available. Reagent Not available BioOcean[®] Stop Solution

Mobility: Not available.

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

UN number	DOT Classification Not available.	TDG Classification Not available.	Mexico Classification Not available.	ADR/RID Not available.	IMDG Not available.	IATA Not available.
UN proper shipping name	Not available.	Not available.	Not available.	Not available.	Not available.	Not available.
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): Not determined. Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed Clean Air Act Section 602 Class I Substances: Not listed Clean Air Act Section 602 Class II Substances: Not listed DEA List I Chemicals (Precursor Chemicals): Not listed DEA List II Chemicals (Essential Chemicals): Not listed SARA 302/304 Composition/information on ingredients

Name	%	FUC	SARA 302 TPQ		SARA 304 RQ	
		EHS	(lbs)	(gallons)	(lbs)	(gallons)
BioOcean [®] Substrate Reagent with hydrogen peroxide	0-1	Yes.	1000	106.1	1000	106.1

SARA 304 RQ: 68292000 lbs / 31004568 kg

SARA 311/312 Classification: Not applicable.

Composition/information on ingredients: No products were found.

State regulations



Massachusetts: None of the components are listed. New York: None of the components are listed. New Jersey: None of the components are listed. Pennsylvania: None of the components are listed.

Section 15. Regulatory information International regulations Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed. Montreal Protocol (Annexes A, B, C, E) Not listed. Stockholm Convention on Persistent Organic Pollutants Not listed. Rotterdam Convention on Prior Inform Consent (PIC) Not listed. UNECE Aarhus Protocol on POPs and Heavy Metals Not listed. Canada BioOcean[®] anti-Human IGFBP-3 detect Not controlled under WHMIS (Canada). WHMIS (Canada) antibodv(100X) BioOcean® Human IGFBP-3 Standard Not controlled under WHMIS (Canada). (lyophilized) BioOcean[®] PBS Buffer with Tween 20 (Assay, Not controlled under WHMIS (Canada). Diluent or Washing buffer) BioOcean[®] Streptavidin-HRP (100x) and Not controlled under WHMIS (Canada). Substrate Reagent BioOcean[®] Stop Solution Canadian lists Canadian NPRI: None of the components are listed.

CEPA Toxic substances: None of the components are listed Canada inventory: Not determined.

Not controlled under WHMIS (Canada).

Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. National Fire Protection Association (U.S.A.)



History Date of issue/Date of revision: 6/11/2016 Date of previous issue: No previous validation. Version: 1 Section 16. Other information Key to abbreviations: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods



LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Notice to reader

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