

**Product line: # 17XXX, # 27101 - # 27499****ELISA Kits**

17165	Endothelin-1 Assay Kit - IBL	27188	Human Syndecan-4 Assay Kit - IBL
17166	Rat GRO/CINC-2 $\beta$ Assay Kit - IBL	27189	Human HB-EGF Assay Kit - IBL
17170	Rat GRO/CINC-2 $\alpha$ Assay Kit - IBL	27190	Human N-ERC/Mesothelin Assay Kit - IBL
17176	Rat MCP-1 Assay Kit - IBL	27193	Rat IL-1 $\beta$ Assay Kit - IBL
17178	Endothelin-2 (1-31) Assay Kit - IBL	27194	Rat TNF- $\alpha$ Assay Kit - IBL
27101	Rat VEGF Assay Kit - IBL	27201	Human GIP, Active form Assay Kit - IBL
27102	Mouse VEGF Assay Kit - IBL	27202	Rat GIP, Active form Assay Kit - IBL
27113	Human CTP (Cochlin-tomoprotein) Assay Kit - IBL	27203	Human GIP, Total Assay Kit - IBL
27121	Human Fibulin-5/DANCE Assay Kit - IBL	27204	Mouse GIP, Total Assay Kit - IBL
27131	Human G-CSF Assay Kit - IBL	27205	Rat GIP, Total Assay Kit - IBL
27137	Mouse GRO/KC Assay Kit - IBL	27258	Human Osteopontin N-Half Assay Kit - IBL
27138	Mouse GRO $\beta$ /MIP-2 Assay Kit - IBL	27259	Mouse Osteopontin N-Half Assay Kit - IBL
27139	Human GRO $\alpha$ /MGSA Assay Kit - IBL	27261	Human DMP1 Assay Kit - IBL
27141	Human SCF Assay Kit - IBL	27262	Human Periostin Assay Kit - IBL
27142	Human GRO $\beta$ Assay Kit - IBL	27295	Rat Leptin Assay Kit - IBL
27158	Human Osteopontin Assay Kit - IBL	27351	Mouse Osteopontin Assay Kit - IBL
27160	Mouse Leptin Assay Kit - IBL	27360	Rat Osteopontin Assay Kit - IBL
27162	Rat GRO/CINC-1 Assay Kit - IBL	27361	Human Intelectin-1/Omentin-1 Assay Kit - IBL
27163	Rat GRO/CINC-3 (GRO $\beta$ /MIP-2) Assay Kit - IBL	27362	Human Mac-2 binding protein (Mac-2bPp) Assay Kit - IBL
27167	Rat Big Endothelin-1 Assay Kit - IBL	27363	Rat DMP1 Assay Kit - IBL
27168	Human Big Endothelin-1 Assay Kit - IBL	27402	Human Total HGF Assay Kit - MCM
27169	Endothelin-3 Assay Kit - IBL	27407	Human c-Met Assay Kit - MCM
27171	Human VEGF Assay Kit - IBL	27408	Rat $\alpha$ 2, 6-Sialyltransferase (E41 Form) Assay Kit - IBL
27174	Mouse c-MPL/TPOR Assay Kit - IBL	27410	Mouse angiopoietin-like 3 Assay Kit - IBL
27175	Human TPO Assay Kit - IBL	27412	Human Total Angiotensinogen Assay Kit - IBL
27177	Endothelin-1 (1-31) Assay Kit - IBL	27413	Mouse Total Angiotensinogen Assay Kit - IBL
27181	Human ApoB-100 Assay Kit - IBL	27414	Rat Total Angiotensinogen Assay Kit - IBL
27182	Human Endothelial Lipase (EL) Assay Kit - IBL	27416	Mouse sAPP $\beta$ -w Assay Kit - IBL
27183	Human HTGL Assay Kit - IBL	27417	Human Thioredoxin Assay Kit - IBL
27184	Human Lipoprotein Lipase (LPL) Assay Kit - IBL	27418	Human Amyloid $\beta$ (N3pE-40) Assay Kit - IBL
27186	Human COX-2 Assay Kit - IBL	27419	Mouse/Rat sAPP $\alpha$ (highly sensitive) Assay Kit - IBL
27187	Rat COX-2 Assay Kit - IBL		

**1. Identification of substance/mixture and company information**

**Product :** Listed on the front cover.


**Product detail :** Stop Solution

**Manufacturer :**

Immuno-Biological Laboratories Co., Ltd.  
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**2. Composition/information on ingredients**

- **Chemical characterization:** Mixture (1N, 0.5 mol/L)
- **Description:** Mixture of substances below contained in water with following concentration.

Dangerous components:	CAS Number	Percent (w/v) %
<b>Sulphuric acid</b> 	7664-93-9	4.9 %

- **Additional information:** This product is exempted from the deleterious materials under control law in Japan.

**3. Hazard identification**

- **Main hazard:** Acute toxicity, corrosive, strong acidity
- **Flammability:** Non flammability
- **Potential health effect:**
  - Skin** Corrosive. Severe burn can occur.
  - Eyes** Corrosive. Can cause blindness.
  - Ingestion** Corrosive. Swallowing can cause severe burns of the mouth, throat and stomach, leading to death. Can cause sore throat, vomiting and diarrhea. Circulatory shock is often the immediate cause of death.
  - Inhalation** Inhalation produces damaging effects on the mucous membranes and upper respiratory tract. Symptoms may include irritation of the nose and throat and labored breathing. May cause lung edema, a medical emergency.

**4. First aid measures**

- **After eye contact:**  
Hold eyelids open and immediately rinse with cool running water for at least 15 minutes, and seek medical attention after rinsing.
- **After skin contact:**  
Wash thoroughly with soap and water. Rinse for 15 minutes. Discard contaminated clothing. Seek medical attention.
- **After swallowing:**  
Do not induce vomiting. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Call a doctor immediately.
- **After inhalation:**  
Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Call a doctor immediately.

**5. Fire fighting measures**

- **Flammability:** Non-flammable
- **Suitable extinguishing agents:** Use dry chemical foam or CO<sub>2</sub>. Don't use water. Water spray can

be used to prevention of spread of a fire.

- **Protective equipment:** No special measures required.

#### 6. Accidental release measures

- **Person-related safety precautions:** Wear acid resistant boots, face-shield, chemical splash goggles and acid resistant gloves.
- **Small spills:** Neutralize with soda ash or lime. Cover spill and mix well until pH is neutral. Do not use organic material such as saw dust. Collect into sealable container and dispose of as hazardous waste.
- **Large spills:** Contain and collect as much as possible in suitable containers. Dam and neutralize with soda ash or lime. Absorb with sand or vermiculite and collect in sealable containers. Do not use organic material such as sawdust. Dispose of as hazardous waste.

#### 7. Handling and storage

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Don't get in eyes, on skin, or on clothing.  
Don't ingest or inhale.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:** Keep container tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances.

#### 8. Exposure control and personal protection gear

- **Engineering controls:** Provide exhaust ventilation of other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
- **Personal protective equipment:** Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

#### 9. Physical and chemical properties (H<sub>2</sub>SO<sub>4</sub> solution)

· <b>Form:</b>	liquid
· <b>Color:</b>	colorless
· <b>Odor:</b>	odorless
· <b>pH:</b>	0.3 (1N solution)
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	undetermined
<b>Boiling point/Boiling range:</b>	undetermined
· <b>Flash point:</b>	Not applicable
· <b>Self-igniting:</b>	Product is not self-igniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Density:</b>	Not determined
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible

#### 10. Stability and reactivity

- **Stability:** Stable under normal condition.
- **Conditions to avoid:** Heat, moisture and incompatibles. Prevent smoking, fires and any other source of ignition around lead acid batteries. Battery electrolyte will react with water to produce heat. Can react with oxidizing or reducing agent. Do not allow acid to mix with any material unless the material is a known compatible.
- **Incompatible materials:** Water, potassium chlorate, potassium perchlorate, potassium permanganate, sodium, lithium, bases, organic material, halogens, metal acetylides, oxides and hydrides, metals, strong oxidizing or reducing agents.
- **Hazardous decomposition products:** Toxic fumes of oxides or sulfur when heated to decomposition. Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas and with cyanides and sulphides to produce poisonous

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hydrogen cyanide and hydrogen sulphide.

### 11. Toxicological information

- **Acute toxicity**
- **Primary irritant effect:**
  - Skin** Causes severe irritation and burns on prolonged contact..
  - Eyes** Caused severe burns. Risk of serious damage to eye.
  - Inhalation** Inhalation of mist or vapor will cause irritation of the upper respiratory tract, high concentrations may cause damage to mucous membranes and lungs.
  - Ingestion** May cause burns to mucous membranes, throat and stomach. May cause severe internal injury.
- **Additional toxicological information:**
  - Acute oral toxicity (LD50): 2140 mg/kg (rat)
  - Acute toxicity of the vapor (LD50): 320 mg/m<sup>3</sup>/2hours (mouse)  
510 mg/m<sup>3</sup>/2hours (rat)
  - (TCL0): 3 mg/m<sup>3</sup>/24w (human)

### 12. Ecological information

- **General notes:** Harmful effect due to pH shift. Implement necessary measures at the spill and disposal.

### 13. Disposal consideration

- **Product:** Dilute concentrate with water and neutralize afterwards with suitable alkali material (sodium hydroxide solution, lime). The formed neutral salts are relatively environment-friendly.
- **Uncleaned packaging:**
  - Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14. Transport information

- **UN-Number:** 2796 (Sulphuric acid with not more than 51 %)  
**Class:** 8  
**PG:** II

### 15. Regulations

- **Labelling according to Japan guidelines:**
  - Sulphuric acid is indicated as a deleterious substance by Poisonous and Deleterious Substances Control Law in Japan (exempts below concentration 10 %).
  - This product is exempted from deleterious substances.**

### 16. Other information

The above information is believed to be correct but does not purport to be all-inclusive and shall be used as a guide. Immuno-Biological Laboratories Co., Ltd. shall not be held liable for any damage resulting from handling or contact with the above product. The burden of safe use of these materials rests solely with the user.