

## Safety Data Sheet

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Catalog Number: STA-308  
 Product Name: OxiSelect™ Protein Carbonyl Immunoblot Kit  
 Recommended Use: Laboratory Research Reagents

**MANUFACTURER:**

Cell Biolabs, Inc.  
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 San Diego, CA 92126

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### SECTION 2. HAZARDS IDENTIFICATION

Rabbit Anti-DNP Antibody (Part No. 230801): One tube – 100 µL

**Classification:**

Acute toxicity, Oral, Category 2 (H300)  
 Acute toxicity, Dermal, Category 1 (H310)  
 Specific target organ toxicity - repeated exposure, Oral, Category 2 (H373)  
 Acute aquatic toxicity, Category 1 (H400)  
 Chronic aquatic toxicity, Category 1 (H410)


<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> Fatal if swallowed or in contact with skin (H300 + H310), May cause damage to organs (Brain) through prolonged or repeated exposure if swallowed (H373), Very toxic to aquatic life with long lasting effects (H410),</p>	
<p><b>Precautionary Statements:</b> Do not breathe dust/fume/gas/mist/vapors/spray (P260), Do not get in eyes, on skin, or on clothing (P262), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), Avoid release to the environment (P273), Wear protective</p>	

gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: immediately call a POISON CENTER / doctor. Rinse mouth (P301 + P310 + P330), IF ON SKIN: gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor (P302 + P350 + P310), Get medical advice/attention if you feel unwell (P314), Take off contaminated clothing and wash before reuse (P362), Collect spillage (P391), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).

Protein Oxidation Immunoblot Control (Part No. 230803): One tube – 100 µL (provided ready-to-use oxidized BSA in 1X reducing SDS-PAGE Sample Buffer, pre-boiled)

**Classification:**

- Flammable liquids, Category 4 (H227)
- Acute toxicity, Oral, Category 4 (H302)
- Acute toxicity, Inhalation, Category 4 (H332)
- Acute toxicity, Dermal, Category 2 (H310)
- Skin irritation, Category 2 (H315)
- Serious eye damage, Category 1 (H318)
- Skin sensitization, Category 1 (H317)
- Specific target organ toxicity - single exposure, Category 3, Respiratory system (H335)
- Specific target organ toxicity - repeated exposure, Liver/Heart, Category 2 (H373)
- Acute aquatic toxicity, Category 2 (H401)
- Chronic aquatic toxicity, Category 1 (H410)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> Combustible liquid (H227), Flammable (H228), Harmful if swallowed or inhaled (H302 + H332), Fatal in contact with skin (H310), Causes skin irritation (H315), May cause an allergic skin reaction (H317), Causes serious eye damage (H318), May cause respiratory irritation (H335), May cause damage to organs (liver, heart) through prolonged or repeated exposure if swallowed (H373), Toxic to aquatic life (H401), Very toxic to aquatic life with long lasting effects (H410).</p>	
<p><b>Precautionary Statements:</b> Keep away from heat/sparks/open flames/hot surfaces - No smoking (P210), Ground/bond container and receiving equipment (P240), Use explosion-proof electrical / ventilating / lighting / equipment (P241), Do not breathe dust/fume/gas/mist/vapors/spray (P260), Do not get in eyes, on skin, or on clothing (P262), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), Use only outdoors or in a well-ventilated area (P271), Contaminated work clothing should not be allowed out of the workplace (P272), Avoid release to the environment</p>	

(P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: immediately call a POISON CENTER / doctor. Rinse mouth (P301 + P310 + P330), IF ON SKIN: gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor (P302 + P350 + P310), IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER / doctor (P304 + P340 + P311), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER / doctor (P305 + P351 + P338 + P310), Get medical advice/attention if you feel unwell (P314), If skin irritation or rash occurs: get medical advice/attention (P333 + P313), Take off contaminated clothing and wash before reuse (P362), In case of fire: use dry sand, dry chemical or alcohol-resistant foam to extinguish (P370 + P378), Collect spillage (P391), Store in a well-ventilated place. Keep container tightly closed (P403 + P233), Store in a well-ventilated place. Keep cool (P403 + P235), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).

10X DNPH Solution (Part No. 230804): One amber bottle – 20 mL


**Classification:**

Corrosive to metals, Category 1 (H290)

Skin corrosion, Category 1B (H314)

Serious eye damage, Category 1 (H318)

Specific target organ toxicity - single exposure, Category 3, Respiratory system (H335)

<b>Pictogram</b>	
<b>Signal Word</b>	<b>Danger</b>
<p><b>Hazard Statements:</b> May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314), May cause respiratory irritation (H335).</p>	
<p><b>Precautionary Statements:</b> Avoid breathing dust/fume/gas/mist/vapors/spray (P261), Wash skin thoroughly after handling (P264), Use only outdoors or in a well-ventilated area (P271), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301 + P330 + P331), IF ON SKIN (or hair): take off immediately all contaminated clothing Rinse skin with water/shower (P303 + P361 + P353), IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. (P304 + P340 + P310), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER / doctor (P305 + P351 + P338 + P310), Wash contaminated clothing before reuse (P363), Absorb spillage to prevent material damage (P390), Store in a well-ventilated place. Keep container tightly closed (P403 +</p>	

P233), Store locked up (P405), Store in corrosive resistant stainless steel container with a resistant inner liner (P406), Dispose of contents/container to an approved waste disposal plant (P501).

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Rabbit Anti-DNP Antibody (Part No. 230801): One tube – 100 µL

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Sodium Azide</b>	<b>0.05%</b>	<b>26628-22-8</b>

Protein Oxidation Immunoblot Control (Part No. 230803): One tube – 100 µL (provided ready-to-use oxidized BSA in 1X reducing SDS-PAGE Sample Buffer, pre-boiled)

CHEMICAL NAME	CONCENTRATION	CAS #
<b>SDS</b>	<b>2%</b>	<b>151-21-3</b>
<b>β-Mercaptoethanol</b>	<b>2%</b>	<b>60-24-2</b>

10X DNPH Solution (Part No. 230804): One amber bottle – 20 mL

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Hydrochloric Acid</b>	<b>2N</b>	<b>7647-01-0</b>

### SECTION 4. FIRST-AID MEASURES

- IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
- IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.
- IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

### SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or CO<sub>2</sub>

- Special protective equipment: Self-contained breathing apparatus

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Evacuate area
- Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
- Absorb with sand or vermiculite, sweep up, place in a bag and hold for waste disposal.
- Avoid raising dust.
- Ventilate area and wash spill site after material pickup is complete.

## **SECTION 7. SAFETY HANDLING AND STORAGE**

- Should be handled by trained personnel observing good laboratory practices.
- Avoid breathing vapor.
- Avoid skin contact or swallowing.
- May cause allergic reaction in sensitized individuals.
- Store in properly labeled containers at temperature on label

## **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

- Engineering measures: Handle in accordance with good industrial hygiene and safety practices. Wash hands immediately after handling the product.
- Personal protective equipment: Face shield or safety glasses, gloves, protective clothing, suitable respiratory equipment in cases of inadequate ventilation.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Form: liquid
- Odor: no data available
- pH: no data available
- Boiling point / range: no data available
- Melting point / range: no data available
- Flash point: no data available
- Evaporation rate: no data available
- Vapor pressure: no data available
- Vapor density: no data available
- Relative density: no data available
- Water solubility: no data available
- Autoignition temperature: no data available
- Decomposition temperature: no data available
- Viscosity: no data available
- Explosive properties: no data available
- Oxidizing properties: no data available

## **SECTION 10. STABILITY AND REACTIVITY**

- Stability: no data available

- Reactivity: no data available
- Conditions to avoid: no data available
- Incompatible materials: no data available
- Decomposition products: no data available

## SECTION 11. TOXICOLOGICAL INFORMATION

- Acute toxicity
  - Sodium Azide: no data available
  - SDS: LD50 Oral 1.288 mg/kg (rat); LC50 Inhalation >3.9 mg/m<sup>3</sup> (rat); LD 50 Dermal 580 mg/kg (rabbit)
  - β-Mercaptoethanol: LD50 Oral 98-162 mg/kg (rat); LC50 Inhalation 2 mg/l (rat); LC50 Inhalation 625 ppm (rat); LD50 Dermal 112-224 mg/kg (rabbit).
  - Hydrochloric acid: no data available
- Skin corrosion/irritation
  - Sodium Azide: no data available
  - SDS: Irritation (rabbit)
  - β-Mercaptoethanol: Irritating to skin-Draize Test (rabbit)
  - Hydrochloric acid: no data available
- Serious eye damage/irritation
  - Sodium Azide: no data available
  - SDS: Risk of serious damage (rabbit)
  - β-Mercaptoethanol: Risk of serious damage to eyes (rabbit)
  - Hydrochloric acid: no data available
- Respiratory or skin sensitization:
  - Sodium Azide: no data available
  - SDS: May cause respiratory irritation
  - β-Mercaptoethanol: Maximisation Test-guinea pig-OECD Test Guideline 406-May cause sensitization by skin contact.
  - Hydrochloric acid: no data available
- Germ cell mutagenicity: no data available
- Carcinogenicity: no data available
- Reproductive toxicity: no data available

## SECTION 12. ECOLOGICAL INFORMATION

- Ecotoxicity
  - Sodium Azide: no data available, harmful to aquatic life with long lasting effects.
  - SDS: LC50 3.6 mg/L in 96 hrs (rainbow trout); mortality NOEC 19.5 mg/L in 96 hrs (rainbow trout); mortality LOEC 4.6 mg/L in 8 days (fathead minnow); growth inhibition LOEC 2.68 mg/L in 6 days (algae)
  - β-Mercaptoethanol: Toxicity to fish: LC50 46-100 mg/l (Golden orfe); Toxicity to Daphnia and other aquatic invertebrates: EC50 1,52 mg/l (Daphnia), EC50 0,89 method: OECD Test Guideline 202 (Daphnia); Toxicity to algae: EC50 12 mg/l (green algae); Toxicity to bacteria: LC50 125 mg/l

- Hydrochloric acid: no data available
- Mobility: no data available
- Biodegradation:
  - $\beta$ -Mercaptoethanol: not readily biodegradable
  - All other hazardous components: no data available
- Bioaccumulation: no data available

### **SECTION 13. DISPOSAL CONSIDERATIONS**

For small quantities: Cautiously add to a large stirred excess of water. Adjust the pH to neutral. Flush the aqueous solutions down the drain with plenty of water.

### **SECTION 14. TRANSPORT INFORMATION - IATA**

- Hazard Class: 8
- Subsidiary Class: none
- Packing Group: II
- UN-No: UN1789

### **SECTION 15. REGULATORY INFORMATION**

- Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available
- Chemical safety assessment: no data available

### **SECTION 16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide for experienced personnel. Cell Biolabs, Inc. shall not be held liable for any damage resulting from the handling or from contact with the above product(s).

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