

## Safety Data Sheet

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

Catalog Number: STA-500  
 Product Name: cAMP ELISA Kit (Colorimetric)  
 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

Goat Anti-Rabbit Antibody Coated Plate (Part No. 250001): One strip well 96-well plate

cAMP Standard (Part No. 250002): One 100 µL vial provided at 10 mM

Rabbit Anti-cAMP Polyclonal Antibody (Part No. 250003): One 15 µL vial

Assay Diluent (Part No. 250005): One 25 mL bottle

10X Wash Buffer (Part No. 250007): One 50 mL bottle

**Classification:**

Acute toxicity, Oral, Category 2 (H300)  
 Acute toxicity, Inhalation, Category 2 (H330)  
 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


**Hazard Statements:** Fatal if swallowed, in contact with skin or if inhaled (H300 + H310 + H330), May cause damage to organs through prolonged exposure (H373), Very toxic to aquatic life with long lasting effects (H410).

**Precautionary Statements:** 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), Avoid release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), Wear respiratory protection (P284), **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. Immediately call a POISON CENTER / doctor (P304 + P340 + P310), Get medical advice/attention if you feel unwell (P314), Take off contaminated clothing and wash before reuse (P362), Collect spillage (P391), Store in a well-ventilated place. Keep container tightly closed (P403 + P233), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).

Lysis Buffer (Part No. 250006): One 50 mL bottle

**Classification:**

- Acute toxicity, Oral, Category 2 (H300)
- Acute toxicity, Inhalation, Category 2 (H330)
- Acute toxicity, Dermal, Category 1 (H310)
- Eye irritation, Category 2A (H319)
- 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, in contact with skin or if inhaled (H300 + H310 + H330), Causes serious eye irritation (H319), May cause damage to organs through prolonged exposure (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), Use only outdoors or in a well-ventilated area (P271), Avoid</p>	

release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), Wear respiratory protection (P284), 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. 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 (P305 + P351 + P338), If eye irritation persists: get medical advice/attention (P337 + P313), Get medical advice/attention if you feel unwell (P314), Take off contaminated clothing and wash before reuse (P362), Collect spillage (P391), Store in a well-ventilated place. Keep container tightly closed (P403 + P233), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).

Triethylamine (Part No. 250008): One 2 mL amber bottle

**Classification:**

- Flammable liquids, Category 2 (H225)
- Acute toxicity, Oral, Category 4 (H302)
- Acute toxicity, Inhalation, Category 3 (H331)
- Acute toxicity, Dermal, Category 3 (H311)
- Skin corrosion, Category 1A (H314)
- Serious eye damage, Category 1 (H318)
- Specific target organ toxicity - Respiratory system, Category 3 (H335)
- Acute aquatic toxicity, Category 2 (H401)


<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> Highly flammable liquid and vapour (H225), Harmful if swallowed (H302), Toxic in contact with skin or if inhaled (H311 + H331), Causes severe skin burns and eye damage (H314), Causes serious eye damage (H318), May cause respiratory irritation (H335).</p>	
<p><b>Precautionary Statements:</b> Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Keep container tightly closed (P233), Ground/bond container and receiving equipment (P240), Use explosion-proof electrical/ventilating/lighting/equipment (P241), Use only non-sparking tools (P242), Take precautionary measures against static discharge (P243), Avoid breathing dust/fume/gas/mist/vapors/spray (P261), 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),</p>	

Avoid release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: call a POISON CENTER if you feel unwell. Rinse mouth (P301 + P312 + P330), 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), 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), 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).

Acetic Anhydride (Part No. 250009): One 1 mL amber bottle

**Classification:**

- Flammable liquids, Category 3 (H226)
- Acute toxicity, Oral, Category 4 (H302)
- Acute toxicity, Inhalation, Category 2 (H330)
- Skin corrosion, Category 1B (H314)
- Serious eye damage, Category 1 (H318)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<p><b>Hazard Statements:</b> Flammable liquid and vapor (H226), Harmful if swallowed (H302), Causes severe skin burns and eye damage (H314), Fatal if inhaled (H330).</p>	
<p><b>Precautionary Statements:</b> Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Keep container tightly closed (P233), Ground/bond container and receiving equipment (P240), Use explosion-proof electrical/ventilating/lighting/equipment (P241), Use only non-sparking tools (P242), Take precautionary measures against static discharge (P243), Do not breathe dust/fume/gas/mist/vapors/spray (P260), 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), Wear protective gloves/protective clothing/eye protection/face protection (P280), Wear respiratory protection (P284), IF SWALLOWED: call a POISON CENTER / doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting (P301 + P312 + P330 + P331), IF ON SKIN (or hair): take off</p>	

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), 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), Store in a well-ventilated place. Keep container tightly closed. Keep cool (P403 + P233 + P235), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).


Stop Solution (Part No. 310808): One 12 mL bottle

**Classification:**

Corrosive to metals, Category 1 (H290)

Skin corrosion, Category 1A (H314)

Serious eye damage, Category 1 (H318)

<b>Pictogram</b>	
<b>Signal Word</b>	Danger
<b>Hazard Statements:</b> May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314).	
<b>Precautionary Statements:</b> Keep only in original container (P234), Wash skin thoroughly after handling (P264), 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 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

Goat Anti-Rabbit Antibody Coated Plate (Part No. 250001): One strip well 96-well plate

cAMP Standard (Part No. 250002): One 100 µL vial provided at 10 mM

Rabbit Anti-cAMP Polyclonal Antibody (Part No. 250003): One 15 µL vial

Assay Diluent (Part No. 250005): One 25 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Thimerosal</b>	<b>0.01%</b>	<b>54-64-8</b>

Lysis Buffer (Part No. 250006): One 50 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Thimerosal</b>	<b>0.01%</b>	<b>54-64-8</b>
<b>Triton X-100</b>	<b>2%</b>	<b>9002-93-1</b>

10X Wash Buffer (Part No. 250007): One 50 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Thimerosal</b>	<b>0.02%</b>	<b>54-64-8</b>

Triethylamine (Part No. 250008): One 2 mL amber bottle

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Triethylamine</b>	<b>100%</b>	<b>121-44-8</b>

Acetic Anhydride (Part No. 250009): One 1 mL amber bottle

CHEMICAL NAME	CONCENTRATION	CAS #
<b>Acetic Anhydride</b>	<b>100%</b>	<b>108-24-7</b>

Stop Solution (Part No. 310808): One 12 mL bottle

CHEMICAL NAME	CONCENTRATION	CAS #
Sulfuric Acid	0.5 N	7664-93-9

#### 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
  - Thimerosal: LD50 Oral 75 mg/kg (rat); LD50 Subcutaneous 98 mg/kg (rat)
  - Triton X-100: LD50 oral 1.800 mg/kg (rat), LD50 dermal 8.000 mg/kg (rabbit)
  - Tween-20: LD50 Oral-rat-40.554,0 mg/kg
  - Triethylamine: LD50 Oral 730 mg/kg (rat); LC50 Inhalation 4h 7,1 mg/L (rat); LD50 Dermal 580 mg/kg (rabbit)
  - Acetic Anhydride: LD50 Oral 1.780 mg/kg (rat); LC50 Inhalation 4.200 mg/m<sup>3</sup> 4 h (rat); LD50 Dermal 4.320 mg/kg (rabbit)
  - Sulfuric Acid: LD50 Oral 2.140 mg/kg (rat); LC50 Inhalation 2 hr, 510 mg/m<sup>3</sup> (rat)
- Skin corrosion/irritation
  - Tween-20: Skin-Human-Mild skin irritation-3d
  - Triethylamine: Skin-rabbit-extremely corrosive and destructive to tissue
  - Acetic Anhydride: Skin-rabbit-Mild skin irritation
  - Sulfuric Acid: Extremely corrosive and destructive to tissue (rabbit)
  - All other hazardous components: no data available
- Serious eye damage/irritation
  - Thimerosal: Mild eye irritation (rabbit)



- Triton X-100: Moderate eye irritation-24 h (rabbit)
- Acetic Anhydride: Eyes-rabbit-Severe eye irritation
- Sulfuric Acid: Severe eye irritation (rabbit)
- All other hazardous components: no data available
- Respiratory or skin sensitization:
  - Thimerosal: prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals
  - All other hazardous components: no data available
- Germ cell mutagenicity: no data available
- Carcinogenicity: no data available
- Reproductive toxicity: no data available

## **SECTION 12. ECOLOGICAL INFORMATION**

- Ecotoxicity
  - Tween-20: Toxicity to fish LC50-other fish-350 mg/l-24h
  - Triton X-100: Toxicity to Daphnia and other aquatic invertebrates- EC50 26 mg/L-48h (Daphnia)
  - Triethylamine: Toxicity to fish: LC50 43,7 mg/L 96h (Pimephales promelas), LC50 126-150 mg/L 60 d (Oncorhynchus mykiss), LOEC 320 mg/L 7 d (Danio rerio); Toxicity to Daphnia and other aquatic invertebrates: LC50 95 mg/L 17 h (bacteria).
  - Acetic Anhydride: Toxicity to fish: LC50 265 mg/L 48 h (Leuciscus idus melanotus); Toxicity to Daphnia and other aquatic invertebrates: EC50 55 mg/L 96h (Daphnia)
  - Sulfuric Acid: LC50 42 mg/L in 96 hrs (mosquito fish); 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)
  - All other hazardous components: no data available
- Mobility: no data available
- Biodegradation
  - Triton X-100: 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: 3
- Subsidiary Class: 8
- Packing Group: II
- UN-No: UN1296

NOTE: THIS PRODUCT IS SHIPPED AS "DANGEROUS GOODS IN EXCEPTED QUANTITIES" UNDER IATA REGULATION 2.6.2.2.



## **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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