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# MATERIAL SAFETY DATA SHEET

EMERGENCY # FOR NATIONAL RESPONSE CENTER (800) 424-8802

Prepared 3/21/05

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SECTION 1. CHEMICAL IDENTIFICATION Product Name: **FITC and PE APO ACTIVE 3**

## **Antibody Specific Active Caspase 3 Detection**

KitPart No: 5001, 5002, 5004 and 5005

Components:

1. Part# 1001 & 1002: 1 Vial of Rabbit anti active affinity purified polyclonal antibody.
2. Part # 2002 & 2001 Vial of FITC Goat anti Rabbit affinity purified polyclonal antibody.
3. Part # 2004 & 2003 Vial of PE Goat anti Rabbit affinity purified polyclonal antibody.
4. Part # 3001 10X Fixative solution

### **Part # 3001 10X Fixative solution**

Synonyms: FORMALDEHYDE, FORMALDEHYDE SOLUTION >35% (10-15% MEOH)

CAS #: 50-00-0

Chemical Formula: CH<sub>2</sub>O

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## SECTION 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

Toxic.

Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. May cause sensitization by skin contact. May cause heritable genetic damage. Readily absorbed through skin. Lachrymator. Contains formaldehyde. Potential cancer hazard.

Target organ(s): Kidneys. Eyes.

Combustible.

### HMIS RATING

HEALTH: 3\*

FLAMMABILITY: 2

REACTIVITY: 2

### NFPA RATING

HEALTH: 3

FLAMMABILITY: 2

REACTIVITY: 2

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

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## SECTION 3 First Aid Measures.

### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting.

### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give

artificial respiration. If breathing is difficult, give oxygen.

#### DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### EYE EXPOSURE

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.

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#### Section 5 - Fire Fighting Measures

##### FLASH POINT

133 °F 56 °C Method: closed cup

##### EXPLOSION LIMITS

Lower: 7 % Upper: 70 %

##### AUTOIGNITION TEMP

420 °C

##### FLAMMABILITY

N/A

##### EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

##### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Combustible liquid. Emits toxic fumes under fire conditions.

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#### Section 6 - Accidental Release Measures

##### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

##### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

##### METHODS FOR CLEANING UP

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

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#### Section 7 - Handling and Storage

##### HANDLING

User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

##### STORAGE

Suitable: Keep tightly closed. Keep away from heat, sparks, and open flame. Store in a cool dry place.

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#### Section 8 - Exposure Controls / PPE

##### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

##### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Government approved respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

Other: Faceshield (8-inch minimum).

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

#### EXPOSURE LIMITS

Country Source Type Value

ACGIH TLV 0.3 ppm

#### Section 9 - Physical/Chemical Properties

Appearance Physical State: Clear liquid

Color: Colorless

Odor: Pungent

Property Value At Temperature or Pressure

Molecular Weight 30.03 AMU

pH N/A

BP/BP Range 100 °C

MP/MP Range N/A

Freezing Point N/A

Vapor Pressure 40 mmHg 39 °C

Vapor Density 1 g/l

Saturated Vapor Conc. N/A

SG/Density 1.09 g/cm<sup>3</sup>

Bulk Density N/A

Odor Threshold N/A

Volatile% N/A

VOC Content N/A

Water Content N/A

Solvent Content N/A

Evaporation Rate 1

Viscosity N/A

Surface Tension N/A

Partition Coefficient Log Kow: 0.35

Decomposition Temp. N/A

Flash Point 133 °F 56 °C Method: closed cup

Explosion Limits Lower: 7 %

Upper: 70 %

Flammability N/A

Autoignition Temp 420 °C

Refractive Index 1.3765

Optical Rotation N/A

Miscellaneous Data N/A

Solubility Solubility in Water: Complete

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#### Section 10 - Stability and Reactivity

##### STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents Incompatible with: aniline, phenol, isocyanates, anhydrides, Strong acids, Strong bases, Amines, Peroxides, Acid chlorides, Acid anhydrides, Alkali metals, Reducing agents.

##### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

##### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not

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#### Section 11 - Toxicological Information

##### ROUTE OF EXPOSURE

Skin Contact: Causes burns.

Skin Absorption: Toxic if absorbed through skin. Readily absorbed through skin.

Eye Contact: Causes burns.

Inhalation: Material is extremely destructive to the tissue of

the mucous membranes and upper respiratory tract. Toxic if inhaled.

Ingestion: Toxic if swallowed.

#### SENSITIZATION

Skin: May cause allergic skin reaction.

#### TARGET ORGAN(S) OR SYSTEM(S)

Eyes. Kidneys. Liver. Heart.

#### SIGNS AND SYMPTOMS OF EXPOSURE

Coughing, chest pains, difficulty in breathing. Gastrointestinal disturbances. May cause convulsions. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Exposure can cause: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema.

#### CHRONIC EXPOSURE - CARCINOGEN

Result: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH,

NTP, or EPA classification.

#### OSHA CARCINOGEN LIST

Rating: Potential cancer hazard.

#### CHRONIC EXPOSURE - MUTAGEN

Result: May alter genetic material.

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#### Section 13 - Disposal Considerations

##### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

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#### Section 14 - Transport Information

##### DOT

Proper Shipping Name: Formaldehyde, solutions,  
flammable

UN#: 1198

Class: 3

Packing Group: Packing Group III

Hazard Label: Flammable liquid

Hazard Label: Corrosive

PIH: Not PIH

##### IATA

Proper Shipping Name: Formaldehyde solution, flammable

IATA UN Number: 1198

Hazard Class: 3

Packing Group: III

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#### Section 15 - Regulatory Information

##### EU ADDITIONAL CLASSIFICATION

Symbol of Danger: T

Indication of Danger: Toxic.

R: 23/24/25-34-39/23/24/25-40-43

Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. May cause sensitization by skin contact.

S: 26-36/37/39-45-51

Safety Statements: In case of contact with eyes, rinse

immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Use only in well ventilated areas.

#### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic.

Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. May cause sensitization by skin contact. May cause heritable genetic damage. Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Use only in well US Statements: Readily absorbed through skin. Lachrymator.

Contains formaldehyde. Potential cancer hazard. Target organ(s):

Kidneys. Eyes. Combustible.

#### UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes

NOTES: This product is or contains a component that is subject to SARA313 reporting requirements.

#### UNITED STATES - STATE REGULATORY INFORMATION

##### CALIFORNIA PROP - 65

California Prop - 65: This product is or contains chemical(s) known to the state of California to cause cancer.

#### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

Section 16 - Other Information

#### DISCLAIMER

For R&D use only. Not for drug, household or other uses.

#### WARRANTY

#### WARRANTY

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT IS NOT NECESSARILY ALL-INCLUSIVE AND SHOULD BE USED ONLY AS A GUIDE. CELL TECHNOLOGY INC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. INDIVIDUALS RECEIVING THE INFORMATION MUST EXERCISE THEIR INDEPENDENT JUDGMENT IN DETERMINING ITS APPROPRIATENESS FOR A PARTICULAR PURPOSE.

## Section 1. Identification

1. Part# 1001 & 1002: 1 Vial of Rabbit anti active affinity purified polyclonal antibody.
2. Part # 2002 & 2001 Vial of FITC Goat anti Rabbit affinity purified polyclonal antibody.
3. Part # 2004 & 2003 Vial of PE Goat anti Rabbit affinity purified polyclonal antibody.

**CAS No.:** NA

**Molecular Weight:** NA

**Chemical Formula:** NA

## Section 2 Hazard Identification

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed

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### Section 3 First Aid Measures

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed  
FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid.  
INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

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### Section 4 Fire Fighting Measures

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire

Fire/Explosion Hazards: Thermal decomposition produces highly toxic fumes.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

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### Section 5 Accidental Release Measures

Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

### Section 6 Handling and Storage

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling

### Section 7 Exposure Controls & Personal Protection

Ventilation:: Local Exhaust

Use Gloves, Safety Glasses with side shield.

Other Protective Equipment: Use safe laboratory handling procedures.

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### Section 8 Stability and Reactivity Information

Stability: Stable

Conditions to Avoid: Avoid contact with incompatible materials.

Materials to Avoid:

Strong acids, aluminum and steel

Hazardous Decomposition Products:

Thermal decomposition may produce toxic gases.

Hazardous Polymerization: Will Not Occur

Condition to Avoid: None known

### Section 9 Additional Information

Conditions aggravated/target organs: Persons with pre-existing eye and skin conditions will be more susceptible. Acute: Skin irritation, mild eye irritation, ingestion of large quantities may cause potassium poisoning. Chronic: Dermatitis, eye damage.  
DOT Classification: Not Regulated

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