

**MATERIAL SAFETY DATA SHEET**

MSDS DATE: 10 / 02 / 06

**SECTION 1 – PRODUCT IDENTIFICATION/MANUFACTURER**

<b>Trade name and synonym:</b>	<b>Human GFAP EIA kit</b>
<b>Catalog number</b>	A05188
<b>CAS number</b>	NA
<b>Manufacturer:</b>	<b>Telephone Number:</b> 33 (1) 39 30 62 60
SPI-BIO	<b>Facsimile Number:</b> 33 (1) 39 30 62 99
Parc d'Activités Pas du Lac	<b>E-Mail:</b> sales@spibio.com
10 bis, avenue Ampère	
F-78180 Montigny-le-Bretonneux, France	

**SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS**

Name of reagents	Ingredients	CAS #	Concentration
<b>Stop Solution</b>	Sulfuric acid	7664-93-9	1.96%
<b>Biotin-labelled Antibody</b>	Methylisothiazolone	26172-54-3	0.02%
	Bromonitrodioxane	30007-47-7	0.02%
	Procline™ 300	NA	0.02%
<b>Streptavidin-Tracer</b>	Methylisothiazolone	26172-54-3	0.02%
	Bromonitrodioxane	30007-47-7	0.02%
	Procline™ 300	NA	0.02%
<b>Substrate (TMB) Solution</b>	3,3',5,5'-Tetramethylbenzidine	54827-17-7	<0.036%
	Ethylenediaminetetraacetate	6381-92-6	0.093%
	5-Chloro-2-methyl-4-isothiazol-3-one	26172-55-4	0.00009%
	2-Methyl-4-isothiazol-3-one	2682-20-4	0.00003%
<b>Human GFAP Standard</b>	Procline™ 300	NA	0.002%
<b>Human GFAP Quality Controls</b>	Sodium azide	26628-22-8	0.095%
	ε-Aminocaproic acid	60-32-2	0.03%
<b>Concentrated Wash Buffer</b>	Thimerosal	54-64-8	0.05%

**SECTION 3 – HAZARDS IDENTIFICATION**

Special indication of hazards to humans and the environment:

Harmful by inhalation, ingestion, and skin absorption.

Irritating to eyes, respiratory system and skin.

The Stop solution contains sulfuric acid in total concentration less than 5% and is not classified as "Corrosive" or "Irritating". The Quality controls (Quality control low and Quality control high) contain sodium azide and ε-aminocaproic acid in total concentrations less than 0.1% and are classified as "Harmful". The Quality controls are based on HIV-1, HIV-2 and HbsAg negative human sera and must be handled as potentially infectious material. The concentrated wash buffer contains thimerosal in total concentration less than 0.1% and is classified as "Harmful".

**SECTION 4 – FIRST AID MEASURES**

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

In case of skin contact, immediately wash skin with soap and copious amounts of water.

In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes.

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**SECTION 5 – FIRE FIGHTING MEASURES**

Extinguish media:

Suitable: water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Special risks:

Specific hazard(s): None

Special protective equipment for fire-fighters: None



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MSDS DATE: 10 / 02 / 06

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

Procedure(s) of personal precaution(s):

Wear suitable laboratory protective equipment lab coats, gloves and safety glasses.

Methods for cleaning up:

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 – HANDLING AND STORAGE

Storage:

Conditions of storage: Store at 2-8°C.

Handling:

Directions for safe handling: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Wear suitable protective clothing including laboratory overalls, safety glasses and gloves. Do not get in eyes, on skin, or on clothing. Do not breathe the vapour. Wash thoroughly after handling.

### SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Mechanical exhaust required.

General hygiene measures:

Wash thoroughly after handling.

Personal protective equipment:

Respiratory protection: none

Hand protection: Compatible chemical-resistant gloves.

Eye protection: chemical safety goggles.

Body protection: protective clothing

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state: liquids except the standard and quality controls, solid

Colour: Streptavidin-tracer, EIA buffer, biotin-labelled antibody: yellowish to maroon, event. reddish

Substrate (TMB) solution – essentially colourless

Stop solution and concentrated wash buffer - colourless

Smell (odour): Odourless

pH value (at 25 °C): Stop solution: < 1; Other reagents: 6.8 - 7.4

Melting point (°C): No data.

Boiling point (°C): No data.

Flash point (°C): No data.

Inflammability: No data.

Vapour tension (°C): No data.

Solubility in water: Soluble.

Partition coefficient n-octanol/water: No data.

### SECTION 10 – STABILITY AND REACTIVITY

Stability:

Stable.

Conditions to be avoided: heat.

Materials to avoid: acids. Contact with acids liberates very toxic gas.

Hazardous decomposition products: Unknown



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### SECTION 11 – TOXICOLOGICAL INFORMATION

The product contains sodium azide in total concentration of 0.095%,  $\epsilon$ -aminocaproic acid in total concentration of 0.03% and thimerosal in total concentration of 0.05%.

Acute toxicity:

LD50 oral rat (mg/kg): unknown.

LD50 skin rat or rabbit (mg/kg): unknown.

Gingivostomatitis LD50 : unknown.

LD50 inhalation: unknown

The toxicological properties have been not fully evaluated.

Sodium azide is toxic if swallowed, inhaled, or absorbed through skin. May cause eye and skin irritation.

### SECTION 12 – ECOLOGICAL INFORMATION

Avoid release to the environment

Water hazard class: 2 (water-damaging substances)

### SECTION 13 – DISPOSAL CONSIDERATION

Substance disposal:

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### SECTION 14 – TRANSPORT INFORMATION

RID/ADR:

No limitation for road transport.

IMDG:

No limitation for sea transport.

IATA:

No limitation for air transport.

### SECTION 15 – REGULATORY INFORMATION

According to the Act No. 157/1998 Coll. on chemical substances and chemical preparations and on amendments in some other laws and acts, the components contained in the Human GFAP EIA kit are non-hazardous substances in said concentrations.

### SECTION 16 – OTHER INFORMATION

Warranty:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Use of product: For R&D use only. Not for drug, household or other uses.