

# SAFETY DATA SHEET

Cat# BN00606, HDAC1 Immunoprecipitation (IP) & Activity Assay Kit

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** HDAC1 Immunoprecipitation (IP) & Activity Assay Kit  
**PRODUCT CODES:** Cat# BN00606  
**MANUFACTURER:** Assay Genie (brand of Reagent Genie Ltd.)  
**ADDRESS:** G1 The Steelworks, Foley Street, Dublin 1  
**EMERGENCY PHONE:** +353 1 8879802

## SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Volume	Safety Information
HDAC Assay Buffer	Proprietary Buffer	9 ml	No hazards
Cell Lysis Buffer	Proprietary Buffer (contains Triton X-100)	100 µl	See below
HDAC Substrate	In DMSO	100 µl	See below
Developer	Liquid (contains Trypsin)	500 µl	See below
AFC Standard	In DMSO	100 µl	See below
Rabbit HDAC1 Antibody	Affinity purified polyclonal antibody (contains Thimerosal)	150 µl	See below
Rabbit IgG	Control Antibody (contains Thimerosal)	75 µl	See below
Protein A/G Sepharose Beads	Contains Ethanol	650 µl	See below
Positive Control (Jurkat Cell Lysate)	Lyophilized	1 vial	No hazards

### Triton X-100:

#### Emergency Overview

**OSHA Hazards:** Irritant, Harmful by ingestion

**GHS Classification:** Serious eye damage (Category 1)  
Skin irritation (Category 3)  
Acute aquatic toxicity (Category 3)  
Chronic aquatic toxicity (Category 3)

#### GHS Label elements, including precautionary statements

**Pictogram:**



**Signal word:** warning

**Hazard statement(s):** H316 Causes mild skin irritation.  
H318 Causes serious eye damage.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statement(s):** P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container to an approved waste disposal plant.

#### HMIS Classification

**Health hazard:** 2

**Flammability:** 1

**Physical hazards:** 0

#### NFPA Rating

**Health Hazard:** 2

**Fire:** 1

**Reactivity Hazard:** 0

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** Harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** Harmful if swallowed.

### DMSO:

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### Emergency Overview

**OSHA Hazards:** Combustible liquid, Target organ effect

**Target Organs:** Eyes, Skin

**GHS Classification:** Flammable liquids (Category 4)

**GHS Label elements, including precautionary statements**

**Pictogram:** none

**Signal word:** Warning

**Hazard statement(s):** H227 Combustible liquid

**Precautionary statement(s):** none

### HMIS Classification

**Health hazard:** 0

**Chronic Health Hazard:** \*

**Flammability:** 2

**Physical hazards:** 0

### NFPA Rating

**Health hazard:** 0

**Fire:** 2

**Reactivity Hazard:** 0

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

**Aggravated Medical Condition:** Avoid contact w/DMSO solutions containing toxic materials or materials with unknown toxicological properties. DMSO is readily absorbed through skin and may carry such materials into the body.

### Trypsin:

#### Emergency Overview

**OSHA Hazards:** Target organ effect, Skin and respiratory sensitizer, Irritant

**Target Organs:** Lungs

**GHS Classification:** Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Respiratory sensitization (Category 1)  
Skin sensitization (Category 1)  
Specific target organ toxicity – single exposure (Category 3)

#### GHS Label elements, including precautionary statements



**Pictogram:**

**Signal word:** Danger

**Hazard statement(s):** H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.

**Precautionary statement(s):** P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

### HMIS Classification

**Health hazard:** 2

**Chronic health hazard:** \*

**Flammability:** 0

**Physical hazards:** 0

### NFPA Rating

**Health hazard:** 2

**Fire:** 0

**Reactivity Hazard:** 0

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

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Ingestion: May be harmful if swallowed.

### Thimerosal:

#### Emergency Overview

**OSHA Hazards:** Target organ effect, Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption

**Target Organs:** Nerves, Kidney

**GHS Classification:** Acute toxicity, Oral (Category 2)  
Acute toxicity, Dermal (Category 1)  
Acute toxicity, Inhalation (Category 1)  
Eye irritation (Category 2B)  
Acute aquatic toxicity (Category 1)

#### GHS Label elements, including precautionary statements

##### Pictogram:



**Signal word:** Danger  
**Hazard statement(s):** H300+H310 Harmful if swallowed or in contact with skin.  
H320 Causes eye irritation.  
H330 Harmful if inhaled.  
H400 Very toxic to aquatic life.

**Precautionary statement(s):** P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 Wash skin thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P330 Rinse mouth.

#### HMIS Classification

**Health hazard:** 4

**Chronic health hazard:** \*

**Flammability:** 1

**Physical hazards:** 0

#### NFPA Rating

**Health Hazard:** 4

**Fire:** 1

**Reactivity Hazard:** 0

#### Potential Health Effects

**Inhalation:** May be fatal if inhaled. May cause respiratory tract irritation.

**Skin:** May be fatal if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be fatal if swallowed.

### Ethanol:

#### Emergency Overview

**OSHA Hazards:** Combustible liquid, Target organ effect, Irritant, Carcinogen

**Target Organs:** Nerves, Liver, Heart

**GHS Classification:** Flammable liquids (Category 3)  
Skin irritation (Category 2)  
Eye irritation (Category 2B)  
Specific target organ toxicity – single exposure (Category 3)

#### GHS Label elements, including precautionary statements



##### Pictogram:

**Signal word:** Warning  
**Hazard statement(s):** H226 Flammable liquid and vapor.  
H315+H320 Causes skin and eye irritation.  
H335 May cause respiratory irritation.

**Precautionary statement(s):** P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### HMIS Classification

Health hazard: 2

Chronic health hazard: \*

Flammability: 2

Physical hazards: 0

### NFPA Rating

Health Hazard: 2

Fire: 2

Reactivity Hazard: 0

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula
Triton X-100	9002-93-1	--	--	--
DMSO	67-68-5	200-664-3	78.13	C <sub>2</sub> H <sub>6</sub> OS
Trypsin	9002-07-7	232-650-8	--	--
Thimerosal	54-64-8	200-210-4	404.81	2-(C <sub>2</sub> H <sub>5</sub> HgS)C <sub>6</sub> H <sub>4</sub> CO <sub>2</sub> Na
Ethanol	64-17-5	200-578-6	46.07	C <sub>2</sub> H <sub>6</sub> O

## SECTION 4: FIRST AID MEASURES

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed:** DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## SECTION 5: FIRE-FIGHTING MEASURES

### DMSO:

**Suitable extinguishing media:** For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products:** Hazardous decomposition products formed under fire conditions –see section 10.

**Further information:** Use water spray to cool unopened containers.

### Ethanol:

**Condition of flammability:** Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products:** Hazardous decomposition products formed under fire conditions— see section 10.

**Further information:** Use water spray to cool unopened containers.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods for cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7: HANDLING AND STORAGE

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### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Flash back possible over considerable distance. Container explosion may occur under fire conditions. Use explosion-proof equipment. Keep away from sources of ignition – no smoking. Take measures to prevent the build up of electrostatic charge.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: -20 °C.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### DMSO:

Components	CAS-No.	Value	Control parameters	Basis
Dimethyl sulfoxide	67-68-5	TWA	250 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

### Thimerosal:

Components	CAS-No.	Value	Control parameters	Basis
Thimerosal	54-64-8	CEIL	0.1 mg/m <sup>3</sup>	USA. OSHA: TABLE Z-1 Limits for Air Contaminants – 1910.1000
Remarks: Skin contact does contribute to exposure.				
		TWA	0.05 mg/m <sup>3</sup>	USA. NIOSH recommended exposure limits
Potential for dermal absorption.				
		C	0.1 mg/m <sup>3</sup>	USA. NIOSH recommended exposure limits
Potential for dermal absorption.				

### Ethanol:

Components	CAS-No.	Value	Control parameters	Basis
Ethanol	64-17-5	TWA	1,000 ppm	USA. ACGIH Threshold Limit Values (TLV)
Remarks: Upper respiratory tract irritation. Confirmed animal carcinogen with unknown relevance to humans.				
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	USA. OSHA: TABLE Z-1 Limits for Air Contaminants – 1910.1000
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA): Table Z-1 Limits for Air Contaminants
The value in mg/m <sup>3</sup> is approximate.				
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	USA. NIOSH recommended exposure limits

### Triton X-100, Trypsin:

Contain no substances with occupational exposure limit values.

#### Personal protective equipment

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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Property	Triton X-100	DMSO
Appearance:	Liquid	Clear liquid
pH:	9.7	No data available
Water Solubility:	Soluble	Completely miscible
Other Solubility:	No data available	No data available
Boiling Point (°C):	>200 °C (>392 °F)	189 °C (372 °F)
Melting Point (°C):	6 °C (43 °F)	16-19 °C (61-66 °F)
Flash Point (°C):	251 °C (484 °F)	87 °C (189 °F)
Ignition Temperature (°C):	No data available	301 °C (574 °F)
Density:	1.070 g/ml	1.1 g/ml

Property	Triton X-100	DMSO	Trypsin	Thimerosal	Ethanol
Appearance:	Liquid	Clear liquid	Beige powder	Beige powder	Clear liquid
pH:	9.7	No data available	No data available	6.7-8.2 at 10 g/l	No data available
Water Solubility:	Soluble	Completely miscible	No data available	No data available	miscible
Other Solubility:	No data available	No data available	No data available	No data available	No data available
Boiling Point (°C):	>200 °C	189 °C	No data available	No data available	78-80 °C
Melting Point (°C):	6 °C	16-19 °C	No data available	234 °C	-144 °C
Flash Point (°C):	251 °C	87 °C	No data available	250 °C	14 °C
Ignition Temp (°C):	No data available	301 °C	No data available	No data available	363 °C
Density:	1.070 g/ml	1.1 g/ml	No data available	0.500 g/cm <sup>3</sup>	0.79 g/cm <sup>3</sup>

## SECTION 10: STABILITY AND REACTIVITY

Property	Triton X-100	DMSO	Trypsin	Thimerosal	Ethanol
Chemical stability:	Stable under recommended storage conditions				
Conditions to avoid:	No data available	Heat, Flames, Sparks	No data available	No data available	Heat, flames, sparks, extreme temperatures, direct sunlight
Materials to avoid:	Strong oxidizing agents, strong acids, strong bases	Acid chlorides, phosphorus halides, strong acids, strong oxidizing agents, strong reducing agents	Strong oxidizing agents	Strong oxidizing agents, strong acids, strong bases	Oxidizing agents, alkali metals, ammonia, peroxides
Hazardous decomposition products:	Carbon oxides	Carbon oxides, sulfur oxides	No data available	Carbon oxides, sulfur oxides, sodium oxides, mercury/mercury oxides	Carbon oxides

## SECTION 11: TOXICOLOGICAL INFORMATION

### Triton X-100:

**Acute toxicity:** no data available

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

### **Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

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**Teratogenicity:** no data available

**Specific target organ toxicity – single exposure (GHS):** no data available

**Specific target organ toxicity – repeated exposure (GHS):** no data available

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** Harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** Harmful if swallowed.

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional information:** RTECS: not available

### DMSO:

**Acute toxicity:** LD50 Oral – rat – 14,500 mg/kg

LC50 Inhalation – rat – 4 h – 40250 ppm

LD50 Dermal – rabbit – >5,000 mg/kg

**Skin corrosion/irritation:** Skin – rabbit – no skin irritation – 4h

**Serious eye damage/eye irritation:** Eyes – rabbit – mild eye irritation

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** Genotoxicity in vitro – mouse – lymphocyte: Cytogenetic analysis

Genotoxicity in vitro – mouse – lymphocyte: Mutation in mammalian somatic cells

Genotoxicity in vivo – rat – Intraperitoneal: Cytogenetic analysis

Genotoxicity in vivo – mouse – Intraperitoneal: DNA damage

**Carcinogenicity:** Carcinogenicity – rat – Oral ☐ Tumorigenic: equivocal tumorigenic agent by RTECS criteria. Skin and appendages: other: tumors.

Carcinogenicity – mouse – Oral ☐ Tumorigenic: equivocal tumorigenic agent by RTECS criteria. Leukemia skin and appendages: other: tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Reproductive toxicity – rat – Intraperitoneal ☐ Effects on fertility: abortion

Reproductive toxicity – rat – Intraperitoneal ☐ Effects on fertility: post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants)

Reproductive toxicity – rat – Subcutaneous ☐ Effects on fertility: post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants). Effects on fertility: litter size (e.g. # fetuses per litter; measured before birth)

Reproductive toxicity – mouse – Oral ☐ Effects on fertility: post-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea). Effects on embryo/fetus: Fetotoxicity (except death, e.g. stunted fetus). Specific developmental abnormalities: musculoskeletal system.

**Teratogenicity:** Developmental toxicity – mouse – Intraperitoneal: Effects on embryo/fetus: Fetotoxicity (except death, e.g. stunted fetus).

Specific developmental abnormalities: musculoskeletal system

**Specific target organ toxicity – single exposure (GHS):** no data available

**Specific target organ toxicity – repeated exposure (GHS):** no data available

**Aspiration hazard:** no data available

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

**Aggravated Medical Condition:** Avoid contact w/DMSO solutions containing toxic materials or materials with unknown toxicological properties. DMSO is readily absorbed through skin and may carry such materials into the body.

**Signs and Symptoms of Exposure:** Effects due to ingestion may include: nausea, fatigue, and/or headache.

**Additional information:** RTECS: PV6210000

### Trypsin:

**Acute toxicity:** LD50 Oral – rat – >5,000 mg/kg

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** May cause allergic respiratory and skin reactions.

**Germ cell mutagenicity:** no data available

### **Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

**Specific target organ toxicity – single exposure (GHS):** Inhalation – may cause respiratory irritation.

**Specific target organ toxicity – repeated exposure (GHS):** no data available

**Aspiration hazard:** no data available

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional information:** RTECS: YN5075000

### Thimerosal:

**Acute toxicity:** LD50 Oral – rat – 75 mg/kg

LD50 Subcutaneous – rat – 98 mg/kg

**Behavioral:** Ataxia. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Nutritional and gross metabolic: Changes in metabolic acidosis.

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** Eye – rabbit – mild eye irritation

**Respiratory or skin sensitization:** Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Germ cell mutagenicity:** Genotoxicity in vitro – hamster – lungs  Micronucleus test

Genotoxicity in vivo – mouse – intraperitoneal  Micronucleus test

### **Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

**Specific target organ toxicity – single exposure (GHS):** no data available

**Specific target organ toxicity – repeated exposure (GHS):** no data available

### Potential Health Effects

**Inhalation:** May be fatal if inhaled. May cause respiratory tract irritation.

**Skin:** May be fatal if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be fatal if swallowed.

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional information:** RTECS: not available

### Ethanol:

**Acute toxicity:** LD50 Oral – rat – 7,060 mg/kg  Remarks: Lungs, thorax, or respiration : other changes

LC50 Inhalation – rat – 10 h – 20000 ppm

**Skin corrosion/irritation:** Skin – rabbit – irritating to skin – 24 h

**Serious eye damage/eye irritation:** Eyes – rabbit – mild eye irritation – 24 h (Draize test)

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

**Carcinogenicity:** Carcinogenicity – mouse – oral  Tumorigenic: equivocal tumorigenic agent by RTECS criteria. Liver: tumors. Blood: Lymphomas including Hodgkin's disease.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



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OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** Reproductive toxicity – human – female – oral ☐ Effects on newborn: apgar score (human only), other neonatal measures or effects, and drug dependence.

**Teratogenicity:** no data available

**Specific target organ toxicity – single exposure (GHS):** Inhalation – may cause respiratory irritation.

**Specific target organ toxicity – repeated exposure (GHS):** no data available

**Aspiration hazard:** no data available

### Potential Health Effects

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** May be harmful if swallowed.

**Signs and Symptoms of Exposure:** Exposure may cause central nervous system depression, narcosis, and/or damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional information:** RTECS: KQ6300000

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## SECTION 12: ECOLOGICAL INFORMATION

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### Triton X-100:

**Persistence and degradability:** no data available

**Toxicity:** no data available

**Bioaccumulative potential:** no data available

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

### DMSO:

**Elimination information (persistence and degradability):** no data available

**Ecotoxicity effects:** Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h; LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia pulex (Water flea) - 27,500 mg/l

Toxicity to algae: EC50 - Lepomis macrochirus (Bluegill) - > 400,000 mg/l - 96 h

**Further information on ecology:** no data available

### Thimerosal:

**Persistence and degradability:** no data available

**Toxicity:** Toxicity to fish: LC50 – Oncorhynchus mykiss (Rainbow trout) – 21.2 mg/l – 48 h

**Bioaccumulative potential:** no data available

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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**Product:** Observe all federal, state, and local environmental regulations.

**Contaminated packaging:** Dispose of as unused product.

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## SECTION 14: TRANSPORT INFORMATION

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### DMSO:

**DOT (US):** UN-Number: 1993 Class: CBL Packing group: III; Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide); Marine pollutant: No; Poison Inhalation Hazard: No

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

### Thimerosal:

**DOT (US):** UN-number: 2025, Class: 6.1, Packing group: III; Proper shipping name: Mercury compounds, solid, n.o.s. (Thimerosal); Marine pollutant: No; Poison Inhalation Hazard: No

**IMDG:** UN-number: 2025, Class: 6.1, Packing group: III; EMS-No. F-A, S-A; Proper shipping name: MERCURY COMPOUNDS, SOLID, N.O.S. (Thimerosal); Marine pollutant: No

**IATA:** UN-number: 2025, Class: 6.1, Packing group: III; Proper shipping name: Mercury compounds, solid, n.o.s. (Thimerosal)

### Ethanol:

**DOT (US):** UN-number: 1170, Class: 3, Packing group: II; Proper shipping name: Ethanol; Marine pollutant: No; Poison inhalation hazard: No

# SAFETY DATA SHEET

## Cat# BN00606, HDAC1 Immunoprecipitation (IP) & Activity Assay Kit

IMDG: UN-number: 1170, Class: 3, Packing group: II; EMS-No: F-E, S-D; Proper shipping name: ETHANOL; Marine pollutant: No

IATA: UN-number: 1170, Class: 3, Packing group: II; Proper shipping name: Ethanol

### **Triton X-100, Trypsin :**

**DOT (US):** Not dangerous goods.

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

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### SECTION 15: REGULATORY INFORMATION

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**OSHA Hazards:** Triton X-100: Irritant, Harmful by ingestion

DMSO: Combustible liquid, Target organ effect

Trypsin: Target organ effect, Skin and respiratory sensitizer, Irritant

Thimerosal: Target organ effect, Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption

Ethanol: Highly flammable liquid, Target organ effect, Irritant, Carcinogen

**SARA 302 Components:** SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.

**SARA 311/312 Hazards:** Triton X-100: Acute Health Hazard

Trypsin, & Thimerosal: Acute Health Hazard, Chronic Health Hazard

DMSO: Fire Hazard, Chronic Health Hazard

Ethanol: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components:** Thimerosal, CAS-No. 54-64-8; Revision Date: 1989-12-01

Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01

**Pennsylvania Right To Know Components:** Triton X-100, CAS-No. 9002-93-1

Dimethyl sulfoxide CAS-No. 67-68-5; Revision Date: 2007-03-01

Trypsin, CAS-No. 9002-07-7

Thimerosal, CAS-No. 54-64-8; Revision Date: 1989-12-01

Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01

**New Jersey Right To Know Components:** Triton X-100, CAS-No. 9002-93-1

Dimethyl sulfoxide CAS-No. 67-68-5; Revision Date: 2007-03-01

Trypsin, CAS-No. 9002-07-7

Thimerosal, CAS-No. 54-64-8; Revision Date: 1989-12-01

Ethanol, CAS-No. 64-17-5, Revision Date: 2007-03-01

**California Prop. 65 Components:** WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm:

Thimerosal, CAS-No. 54-64-8; Revision Date: 1989-12-01

### EU regulations:

Component	Risk Phrases	Safety Phrases
Triton X-100	R22, R52/53	S22, S36/37/39, S45
DMSO	R10, R36/37/38	S24/25, S36/37/39, S45
Trypsin	R36/37/38, R42/43	S22, S24, S26, S36/37, S45
Thimerosal	R26/27/28, R33, R50/53	S28, S36, S45, S60, S61
Ethanol	R11, R20/21/22	S16, S36/37/39, S45

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### SECTION 16: OTHER INFORMATION

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**DISCLAIMER:** 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. Assay Genie shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.