

Material Safety Data Sheet

Thiol Detection Assay Kit (Ellman's method)

Revision Number: 2.1

Last updated 10/2/2025

Product and Company Identification

Product Name: Thiol Detection Assay Kit
Catalog Number: TH01DE
Manufacturer/Supplier: Cellspect Co., Ltd.
 2-4-23, Kitaiioka, Morioka-shi, Iwate,
 020-0857, Japan
 Tel: +81-19-134-6616, FAX: +81-19-903-0559
 Email: support@cellspect.com

Firefighting: Wear self-contained breathing apparatus and protective clothing to prevent with skin and eyes.

Handling and Storage

Keep receptacles tightly sealed.
 Store Reagent, Standard in a cool and dark space(2-8°C).

Components

Item Number	Name	Quantity
TH01DE	R-A Buffer solution	20mL
	R-B Chromogen (DTNB) solution	3mL
	STD N-Acetyl-L-cysteine powder (as 1.0mM thiol)	Vial × 1

Accidental Release Measures

Use appropriate protective equipment and methods to clean up spilled substances promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

Hazards Identification

Mixture of the following substances with non-hazardous additions:

R-A Buffer solution		
Tris(hydroxymethyl)aminomethane	(CAS#:77-86-1)	<2%
R-B Chromogen solution		
5,5'-dithiobis(2nitrobenzoic acid)	(CAS#:69-78-3)	<0.1%
STD Thiol		
STD N-Acetyl-L-cysteine	(CAS#:616-91-1)	>99%

Exposure Controls / Personal Protection

Keep away from foodstuffs and beverages. Wash your hands before and after the work. Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices.

Stability and Reactivity

Thermal Decomposition : no decomposition if used according to specifications.
Dangerous Products of Decomposition : Carbon oxides. Carbon dioxide. Chlorine oxide. Sulfur oxide.
Dangerous Reactions: none

Health Hazard Data: irritant. Irritating to skin, eyes and respiratory system. Harmful if swallowed. Avoid contact and inhalation. Standard laboratory safety procedures include wearing safety glasses, gloves and protective clothing.

Toxicological Information

Inhalation: Harmful if inhaled
Ingestion: Harmful if swallowed
Skin: Causes skin irritation
Eyes: Causes eye irritation
Target Organs/ Chronic Exposures: No data available

First Aid Measures

If eye or skin contact occurs, immediately wash affected area with soap and copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician to seek medical advice.

Ecological Information

Do not allow product to reach ground water, watercourse, or sewage system.

If swallowed, wash out mouth with water provided person is conscious and call a physician to seek medical advice.

If inhaled, move individual to fresh air and call physician to seek medical advice.

Disposal Considerations

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Consult local, state or national regulations for proper disposal.

Fire Fighting Measures

Explosion Hazards: No data available
Flash Point: No data available
Autoignition Temperature: No data available
Flammability(R-A,R-B): No data available
Flammability(Standard): Slightly flammable to flammable in presence of open flames and sparks.
Extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam

Transport Information

This substance is considered to be Non-Hazardous for transport. This substance is considered to be Non-Hazardous for air transport.

Regulatory Information

United States Classification and Label Text:
 United States Regulatory Information:
 SARA Listed: NO.

Other Information

This material is sold for research purposes only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as guide. Users should make independent decisions regarding completeness of the information based on all sources available. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Metallogenics shall not be held liable for any damage resulting from handling or from contact with the above product.