

MATERIAL SAFETY DATA SHEET

E. coli Host Cell Protein ELISA kit

FILE NO.: AB00105
MSDS DATE: 8 March 2010

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: *E. coli* Host Cell Protein ELISA kit
SYNONYMS:
PRODUCT CODES: HCP-002

MANUFACTURER: Canopy Biosciences
ADDRESS: 4320 Forest Park Avenue, Saint Louis, MO 63108, USA

EMERGENCY PHONE: 314-833-9764
OFFICE PHONE: 314-833-9764
FAX PHONE: 314-932-4038

CHEMICAL NAME: Not applicable
CHEMICAL FAMILY: Not applicable
CHEMICAL FORMULA: Not applicable

PRODUCT USE: Determination of *E. coli* host cell protein contamination in bulk products expressed in *E. coli* expression systems

PREPARED BY: Rachel Delston

SECTION 1 NOTES:

SECTION 2: CHEMICAL COMPOSITION AND INFORMATION ON INGREDIENTS

	CAS#	EINECS#	Concentration	Hazard Classification
Coated Clear 96 Well Plate				
Affinity purified rabbit antibodies	Not listed	Not listed	<100µg/ml	Not Classified
Buffer used for component suspension				
Deionized water	7732-18-5	231-791-2	>97%	Not Classified
Sodium Chloride	7647-14-5	231-598-3	<1%	Irritant
Potassium Chloride	7447-40-7	231-211-8	<1%	Irritant
Sodium Phosphate Dibasic	7558-79-4	231-448-7	<1%	Not Classified
Potassium Phosphate Monobasic	7778-77-0	231-913-4	<1%	Irritant
Reporting Antibody (0.15ml) in buffer				
Biotin-labeled rabbit polyclonal antibody	Not listed	Not listed	150µg/ml	Not Classified
Streptavidin-HRP conjugate (0.75ml) in buffer				
Streptavidin-Horse Radish Peroxidase conjugate	Not listed	Not listed	4µg/ml	Not Classified
<i>E. coli</i> HCP standards				
<i>E. coli</i> cell proteins	Not listed	Not listed	<300ng/ml	Not Classified
5x Dilution Buffer (20ml)				
Deionized water	7732-18-5	231-791-2	>95%	Not Classified
Sodium Chloride	7647-14-5	231-598-3	<5%	Irritant
Potassium Chloride	7447-40-7	231-211-8	<1%	Irritant
Sodium Phosphate Dibasic	7558-79-4	231-448-7	<1%	Not Classified
Potassium Phosphate Monobasic	7778-77-0	231-913-4	<1%	Irritant
10x PBS-T (30ml)				
Deionized water	7732-18-5	231-791-2	>90%	Not Classified
Sodium Chloride	7647-14-5	231-598-3	<10%	Irritant
Potassium Chloride	7447-40-7	231-211-8	<1%	Irritant
Sodium Phosphate Dibasic	7558-79-4	231-448-7	<2%	Not Classified
Potassium Phosphate Monobasic	7778-77-0	231-913-4	<1%	Irritant

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Tween20	9005-64-5		<1%	
TMB Substrate (30ml)				
TMB substrate	Aqueous mixture	Not listed	<1%	Irritant
Stop Solution (15ml)				
Distilled water	7732-18-5	231-791-2	>95%	Not Classified
Sulfuric Acid	7764-93-9	231-639-5	<5%	Irritant

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Avoid eye contact and ingestion. If skin contact occurs, flush with water. Handle stop solution with care as it is caustic; flush with water immediately if it comes in contact with body parts.

POTENTIAL HEALTH EFFECTS

EYES: Avoid eye contact at all costs. If eye contact does occur, see Section 4 (First Aid Measures) below.

SKIN: Avoid skin contact

INGESTION: Do not ingest

INHALATION: Do not inhale

ACUTE HEALTH HAZARDS: Stop solution is caustic. Prolonged skin contact with other components may irritate skin. This kit is designed to be used in a laboratory environment and users should wear appropriate lab attire to prevent skin and eye contact.

CHRONIC HEALTH HAZARDS: None known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known

CARCINOGENICITY: None known

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: If chemical contacts the eyes, use an eye wash station or similar device to flush the victim's eyes while open with water for 15 minutes. Remove contact lenses if worn. See medical attention if irritation persists.

SKIN: If chemical contacts the skin, wash thoroughly with soap and water

INGESTION: If chemical is swallowed, call poison control center (1-800-222-1222 in the US) and seek advice. If victim is conscious, rinse mouth thoroughly with water. Do not give liquids if victim is unconscious. If medical advice is not available, do not induce vomiting. Take victim to a medical professional, together with this MSDS and a copy of the label.

INHALATION: Move victim to fresh air. If breathing difficulty persists, seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: Non flammable
(% BY VOLUME) **LOWER:** Non flammable

FLASH POINT:

F: Non flammable

C: Non flammable

METHOD USED:

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AUTOIGNITION TEMPERATURE:

F: Non flammable
C: Non flammable

NFPA HAZARD CLASSIFICATION

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0
OTHER: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0
PROTECTION: 0

EXTINGUISHING MEDIA: Use extinguisher appropriate for surrounding fire

SPECIAL FIRE FIGHTING PROCEDURES: This product is water based with no known fire hazards

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is water based with no known fire or explosion hazards

HAZARDOUS DECOMPOSITION PRODUCTS: None known

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Appropriate protective clothing should be worn and absorbent material used to soak up the spill. Place all spill residue in appropriate containers for disposal.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Wear protective lab clothing and eye protection and avoid getting this product on you or in you. Wash thoroughly after using it and do not smoke, drink or eat while using it.

OTHER PRECAUTIONS:

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING AND VENTILATION CONTROLS: Use with adequate ventilation to ensure that exposure limits are maintained below established limits. Currently, international exposure limits are not established for all the components of this kit. Please check with a competent authority in each country for the most recent limits in place.

RESPIRATORY PROTECTION: If exposure limits are exceeded, use only respiratory protection authorized in the US Federal OSHA Respiratory Protection Standard (29 CFR 1910.134) or equivalent standard.

EYE PROTECTION: Safety glasses with side shields are recommended.

SKIN PROTECTION: Compatible protective gloves are recommended.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Use body protection appropriate to the task. At a minimum, a lab coat, closed toed shoes, protective gloves and safety glasses should be worn while using this kit.

WORK HYGIENIC PRACTICES: Wash hands after use, do not eat, drink or smoke while using this kit.

EXPOSURE GUIDELINES: Do not intentionally inhale or spill the contents of this kit on the body. If inhaled, seek immediate medical attention. If spilled on body, flush liberally with water and seek medical attention if contact occurs with eyes, ears or mucus membranes.

SECTION 8 NOTES:

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear liquids

ODOR: No data

PHYSICAL STATE: No data

pH AS SUPPLIED: Stop solution, pH = 0. Other components have neutral pH
pH (Other):

BOILING POINT: No data
F:
C:

MELTING POINT: No data
F:
C:

FREEZING POINT: No data
F:
C:

VAPOR PRESSURE (mmHg): No data
@
F:
C:

VAPOR DENSITY (AIR = 1): No data
@
F:
C:

SPECIFIC GRAVITY (H₂O = 1): No data
@
F:
C:

EVAPORATION RATE: No data

BASIS (=1):

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

SOLUBILITY IN WATER: No data

PERCENT SOLIDS BY WEIGHT: No data

PERCENT VOLATILE: No data
BY WT/ BY VOL @
F:
C:

VOLATILE ORGANIC COMPOUNDS (VOC): No data

WITH WATER: LBS/GAL
WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: No data

VISCOSITY: No data
@
F:
C:

SECTION 9 NOTES:

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SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of storage and temperature

HAZARDOUS DECOMPOSITION PRODUCTS: When stored as recommended, no known hazardous decomposition products are formed during the shelf life of this product

INCOMPATIBILITY (MATERIAL TO AVOID): No data available

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: No data available

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No known environmental hazards. However, work practices should be aimed at minimizing environmental contamination.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Waste disposal must be in accordance with appropriate US Federal, State and local regulations, or, where appropriate, those of the country in which this product is used.

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

DOT Classification: Non-regulated material
DOT Labeling Requirements: None
IATA Labeling Requirements: None

This product is not classified as dangerous goods, per US DOT regulations, under 49 CFR 172.101

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components on this product are listed on the USA Toxic Substances Control Act (TSCA) or are exempt from listing.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): None

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): None

311/312 HAZARD CATEGORIES: Acute Health: Yes, Chronic Health: No, Fire: No, Reactivity: No.

313 REPORTABLE INGREDIENTS: None at quantities present in this kit

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INTERNATIONAL REGULATIONS: Kit contents believed to be either listed or exempt. Consult local regulations for your locality.

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SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER: This product is intended for research purposes only. Not intended for diagnostic procedures or for use in humans or animals. While this MSDS is based on technical data deemed to be reliable, Canopy Biosciences assumes no responsibility for the completeness or accuracy of the information contained herein. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the health and safety of themselves and others associated with this kits use.