



Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Estrogen Receptors Bio-Assay for Environmental Monitoring (ER_EM) Assay Kit;

Product Number: EM00431

Supplier: INDIGO Biosciences, Inc., 3006 Research Drive, Suite A1, State College, PA 16801, USA; +1 (814) 234-1919

Recommended Use: INDIGO's kits are intended for research purposes only, and not for diagnostic or therapeutic use in humans.

SECTION 2: HAZARDS IDENTIFICATION

Mammalian reporter cells: Bio-safety Level 1 (BSL-1). Non-infectious, non-hazardous, mycoplasma-negative, devoid of exogenous self-replicating or transmissible genetic elements of viral vectors; use personal protection devices (Section 8) to avoid direct contact.

Cell culture media (CRM and CSM): contains 2% charcoal-stripped fetal bovine serum; use personal protection devices (Section 8) to avoid direct contact.

NFPA rating: 17-β-Estradiol

Health hazard: 0

Fire hazard: 0

Reactivity hazard: 0

Potential Health Effects

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

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Signal word: Not applicable

Hazard statement: Mammalian reporter cells are non-hazardous; see Toxicological Information (Section 11) for further information.

Precautionary statement: Use personal protection devices (Section 8) to avoid direct contact.

Pictograms: Not applicable

SECTION 3: COMPOSITION / INGREDIENT INFORMATION

Bioactive Kit Components: 17-β-Estradiol (CAS: 50-28-2); 25 nM solution solvated in DMSO

SECTION 4: FIRST AID MEASURES

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

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Rinse mouth with water. Consult a physician.



SECTION 5: FIRE-FIGHTING MEASURES

Fire hazard: 0; fire-fighting measures not necessary

SECTION 6: ACCIDENTAL RELEASE MEASURES

Not applicable

SECTION 7: HANDLING AND STORAGE

Handling: Use personal protection devices (Section 8) to avoid direct contact.

Storage: Reporter cells, detection buffer, and detection substrate must be stored at -80C; all other assay kit components must be stored at temperatures no warmer than -20C, but may remain at -80C storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls: Not applicable; refer to technical manual for equipment specifications.

Personal protective equipment:

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: Safety glasses with side shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU).

Skin and body protection: Impervious clothing. 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. Always wash hands 1.) immediately after using these kit components, and 2.) before leaving the lab environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Media: reddish hue; cell suspension: cloudy; all other components: clear

State: all components cryo-preserved / solid

Upper/lower flammability or explosive limits: Not applicable

Odor: Not applicable

Vapor pressure: No data available

Odor threshold: No data available

Vapor density: No data available



pH: No data available

Relative density: No data available

Melting point/freezing point: No data available

Solubility: No data available

Initial boiling point and boiling range: Not applicable

Flash point: Not applicable

Evaporation rate: No data available

Flammability: Not applicable; fire hazard: 0

Partition coefficient: No data available

Auto-ignition temperature: Not applicable; fire hazard: 0

Decomposition temperature: No data available

Viscosity: No data available

SECTION 10: STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions

Possibility of hazardous reactions: No data available

Materials to avoid: Strong oxidizing agents

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions: carbon oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: May cause sensitization by skin contact.

Reproductive toxicity: 17- β -Estradiol is a presumed reproductive toxicant. Damage to fetus cannot be excluded.

Carcinogen indication: Not applicable

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

PBT and vPvGB assessment: No data available

Other adverse effects: No data available



SECTION 13: DISPOSAL CONSIDERATIONS

Do NOT dispose of liquid or solid waste through municipal drainage or landfill systems. Contact a licensed professional waste disposal service to dispose of bioactive and serum-containing materials provided in this assay kit product.

SECTION 14: TRANSPORT INFORMATION

DOT (US): Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

SECTION 15: REGULATORY INFORMATION

OSHA Hazards: Target Organ Effect, Skin sensitizer

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

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

SECTION 16: OTHER INFORMATION

Date of last revision: 29 March 2023