Safety data sheet

ClearBand RIPA Lysis Buffer, Complete System

Product name ClearBand RIPA Lysis Buffer, Complete System	Catalog no. RIPA50CS
Synonyms Complete protein extraction and inhibition system	Revision date -
CAS no. -	Document version / date 4 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ClearBand RIPA Lysis Buffer, Complete System
Product code	RIPA50CS
CAS number	-
EC number	-
Recommended use	Extraction of total protein from cultured cells and tissues. Three separate components: ready-to-use RIPA Lysis Buffer, 100x Protease Inhibitor Cocktail and 100x PMSF. Research use only.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP) for the kit as supplied.
Label elements	No GHS hazard pictograms or signal word required for the kit as supplied.
Symbols / pictograms	None
Signal word	None
Hazard statements	No hazard statements assigned to the kit as supplied. Follow safe handling measures for separately packaged concentrates.
Precautionary statements - Prevention	Avoid eye and skin contact with concentrated components. Wear gloves, laboratory coat and safety eyewear; use good laboratory hygiene.
Precautionary statements - Response	For splashes, rinse affected eyes/skin with water; obtain prompt medical advice after ingestion, inhalation exposure or persistent symptoms.
Other hazards	The kit contains separately packaged 100x inhibitor stocks, including PMSF. Avoid direct exposure to concentrated components and follow good laboratory practice.

Composition & response

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03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ClearBand RIPA Lysis Buffer, Complete System
Synonyms	Complete protein extraction and inhibition system
Concentration	RIPA buffer: ready-to-use; inhibitors: 100x concentrates. Kit pack size: 50 mL.
Formula	Not applicable (multi-component kit)
Molecular weight	Not applicable (multi-component kit)
Mixture statement	A: ready-to-use aqueous RIPA Lysis Buffer (detergent mixture). B: 100x Protease Inhibitor Cocktail (proprietary composition). C: 100x PMSF stock (phenylmethylsulfonyl fluoride, CAS 329-98-6, stock solvent/concentration not stated). These are separate components.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Flush eyes with water for at least 15 minutes. Remove contact lenses if easy. Seek medical advice, particularly for concentrated stocks.
Skin contact	Remove contaminated clothing and wash skin with plenty of water and soap. Seek advice if irritation or other symptoms occur.
Inhalation	Move to fresh air if mist or vapours are inhaled. Seek medical advice if symptoms occur.
Ingestion	Rinse mouth and obtain medical advice promptly. Do not induce vomiting. Do not give anything by mouth to an unconscious person.
Self-protection of first aider	Wear gloves and splash eye protection; avoid contacting concentrated inhibitor stocks.
Most important symptoms / effects	RIPA buffer may irritate sensitive skin/eyes. Other effects depend on concentration and solvent of the separate inhibitors.
Notes to physicians	Treat symptomatically; identify the specific contacted kit component for medical personnel.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, CO2, foam or dry powder suitable for the materials and surrounding fire.
Unsuitable extinguishing media	Avoid media that spread a possible solvent fire.
Special hazards arising from the substance or mixture	RIPA buffer is an aqueous detergent solution; the 100x PMSF stock solvent is not confirmed and may be flammable. Combustion can yield hazardous fumes.
Explosion data	Flammability data for inhibitor stock solvents are not available.
Advice for firefighters	Use self-contained breathing apparatus and protective clothing when needed.

Safe use & protection

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06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Identify the spilled component. Use suitable gloves, goggles and ventilation; remove ignition sources if the inhibitor stock solvent is unknown.
Environmental precautions	Keep concentrated inhibitor stocks out of drains and the environment.
Methods and materials for containment and cleaning up	Absorb small liquid spills with compatible inert material; transfer to labeled sealed containers. Clean the surface after collecting material.
Reference to other sections	See Sections 8 and 13.

07 HANDLING AND STORAGE

Precautions for safe handling	Keep the kit components separately labeled; avoid splash/aerosol exposure and ingestion. Prepare the working mixture only immediately before use.
Conditions for safe storage	Store RIPA Lysis Buffer at 4 C. Store 100x Protease Inhibitor Cocktail and 100x PMSF at -20 C. Ship with blue ice.
Container labeling	Separate RIPA, protease inhibitor and PMSF vials; never substitute the base-buffer hazard label for inhibitor stocks.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No complete-kit occupational limit. Evaluate stock solvents and PMSF under applicable local exposure-control requirements.

8.2 Exposure controls

Engineering measures	Use standard laboratory ventilation; consider local exhaust when handling concentrated stocks if vapours are possible.
Hygiene measures	Wash hands after handling; no eating or drinking in laboratory areas.
Eye / face protection	Protective laboratory glasses or splash goggles (EN 166).
Hand protection	Chemical-resistant gloves suitable for the stock solvent; replace if contaminated.
Skin and body protection	Laboratory coat and closed shoes.
Respiratory protection	Not normally required for small closed-vial handling under adequate ventilation; assess if aerosols/vapours occur.

Material properties

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09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Three separate liquid components (buffer and inhibitor stocks).
Odor	No kit-specific data available.
Odor threshold	No data available
pH	No finished-kit pH; pH of individual components not provided.
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	Not determined for inhibitor stock solvents.
Evaporation rate	No data available
Flammability (solid, gas)	RIPA buffer is aqueous; flammability of concentrated inhibitor stocks undetermined.
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 STABILITY AND REACTIVITY

Reactivity	No kit-wide reactivity data available; component-specific incompatibilities must be reviewed.
Chemical stability	Store each component under its specified temperature. PMSF can lose activity in aqueous working solution.
Possibility of hazardous reactions	No data available for all separately supplied components.
Conditions to avoid	Heat, ignition sources, inappropriate storage and prolonged standing of prepared working mixtures.
Incompatible materials	Strong oxidizing agents and other reagent-specific incompatibilities; stock solvent composition unknown.
Hazardous decomposition products	Hazardous decomposition products possible during fire; specific products not established.

Health & environment

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11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Standalone RIPA buffer is not classified for acute toxicity; complete-kit and inhibitor-stock data are not available.
Skin corrosion / irritation	RIPA buffer may irritate sensitive individuals; inhibitor stock data unavailable.
Serious eye damage / eye irritation	RIPA buffer may irritate eyes; concentrated stock effects not assessed.
Carcinogenicity	No finished-kit data available.
Reproductive toxicity	No finished-kit data available.
STOT - SE	No finished-kit data available.
STOT - RE	No finished-kit data available.
Aspiration hazard	No finished-kit data available.

11.2 Potential health effects

Ingestion: concentrated stocks may be harmful; seek medical advice if swallowed.
Inhalation: avoid aerosols or stock vapours.
Skin: possible irritation.
Eyes: possible irritation or more severe effects from concentrated stocks.

11.3 Additional information

Handle separately packaged inhibitor solutions using suitable laboratory precautions.

12 ECOLOGICAL INFORMATION

Ecotoxicity	No complete-kit ecotoxicity data. Do not discharge concentrated inhibitors.
Persistence and degradability	No finished-kit data available.
Bioaccumulative potential	No finished-kit data available.
Mobility in soil	No finished-kit data available.
Results of PBT and vPvB assessment	Not assessed.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Collect separately supplied stock inhibitors and unused mixed lysates according to institutional chemical-waste rules; do not release inhibitor concentrates to drains.
Contaminated packaging	Dispose of contaminated containers as laboratory chemical waste. Do not reuse.

Transport & reference

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14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	REACH and CLP requirements apply. The kit as supplied is not classified as hazardous under CLP. Follow component-specific laboratory handling precautions.
Environmental hazards	Not classified as environmentally hazardous for transport.
Chemical safety assessment	No chemical safety assessment available for the assembled kit.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail