

SECTION 1 – PRODUCT IDENTIFICATION / MANUFACTURER

Trade name and synonym: Mouse/Rat Leptin EIA kit

Catalogue number: A05176

CAS number: None Applicable

Intended Product Use: Intended for research use only

Manufacturer: BERTIN PHARMA
Parc d'Activités Pas du Lac
10 bis, avenue Ampère
F-78180 Montigny-le-Bretonneux, France

Telephone Number: 33 (1) 39 30 62 60

Fax Number: 33 (1) 39 30 62 99

Hours of Operation: 9:00 am to 5:00 pm EU CT (GMT+1)

E-Mail: bioagent@bertinpharma.com

Emergency telephone number: ORFILA / I.N.R.S. +33 1 45 42 59 59

SECTION 2 – HAZARDS IDENTIFICATION

GHS Identification: Skin corrosion/irritation category 2



Symbols:

Warning mention: Warning

Hazard mention:

H315 : Causes skin irritation

Components contained - excepted Stop Solution - are non-hazardous substances for health and environment in said concentrations (they are mixtures that contain less than 1% hazardous chemicals and less 0.1% carcinogenic chemicals).

GHS Precautionary Statements:

Prevention:

P281 : Use personal protective equipment as required

P280 : wear protective gloves

P264 : wash hands thoroughly after handling

P262 : Do not get in eyes, on skin or on clothing

Response:

P308+P314 : if exposed or concerned : get medical advice/attention if you feel unwell.

P302+P352 : if on skin : wash with plenty water

P332+P313 : if skin irritation occurs : get medical advice/attention

P362+P364 : take off contaminated clothing and wash it before reuse

Storage:

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

Elimination:

P501 : dispose of content / container in accordance with local regulations.

REACH Identification: None Applicable

Symbols: None Applicable

Symbol Letter: None Applicable

Hazard: None Applicable

Risk Phrase: None Applicable

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS
3.1 Antibody precoated Plate

Description: 96 wells microtiter striped plate coated with anti-mouse leptin antibody, vacuum sealed.

Identification of Components Not Classified as Dangerous

This product contains the substances listed below, which are not defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Non Dangerous component	EINECS N°	CAS N°	Content (w eight percent)	EU Hazard Symbol Letter	R Phrases
Anti-mouse leptin antibody	None	None	Trade Secret	None	None

3.2 Streptavidin-HRP Tracer

Description: Streptavidin coupled with HRP.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
Methylisothiazolin-3-one	220-239-6	2682-20-4	0.02%	T, N	R20/21/22, R34, R43, R50/53
Bromonitrodioxane	250-001-7	30007-47-7	0.02%	Xn	R22, R38
Chloromethylisothiazolin-3-one	247-500-7	26172-55-4	< 0.01%	T, N	R20/21/22, R34, R43, R50/53

Identification of Components Not Classified as Dangerous

This product contains the substances listed below, which are not defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Non Dangerous component	EINECS N°	CAS N°	Content (w eight percent)	EU Hazard Symbol Letter	R Phrases
Streptavidin coupled with HRP	None	None	Trade Secret	None	None

3.3 Mouse or Rat Leptin Standard

Description: mouse or rat leptin recombinant protein.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
Methylisothiazolin-3-one	220-239-6	2682-20-4	0.02%	T, N	R20/21/22, R34, R43, R50/53
Bromonitrodioxane	250-001-7	30007-47-7	0.02%	Xn	R22, R38

Identification of Components Not Classified as Dangerous

This product contains the substances listed below, which are not defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Non Dangerous component	EINECS N°	CAS N°	Content (w eight percent)	EU Hazard Symbol Letter	R Phrases
Leptin recombinant protein	None	None	Trade Secret	None	None

3.4 Mouse or Rat Leptin Quality Control

Description: stabilized mouse or rat serum with a known amount of leptin protein.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
ε-Aminocaproic acid	200-469-3	60.32-2	0.03%	Xi	R36/37/38
Thimerosal	200-210-4	54-64-8	0.05%	T+, N	R26/27/28, R33, R50/53

Identification of Components Not Classified as Dangerous

This product contains the substances listed below, which are not defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Non Dangerous component	EINECS N°	CAS N°	Content (w eight percent)	EU Hazard Symbol Letter	R Phrases
mouse or rat leptin protein	None	None	Trade Secret	None	None

3.5 EIA Buffer

Description: ready-to-use dilution buffer.

Identification of Components Not Classified as Dangerous

This product contains the substances listed below, which are not defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Non Dangerous component	EINECS N°	CAS N°	Content (w eight percent)	EU Hazard Symbol Letter	R Phrases
Component A	None	None	Trade secret	None	None

3.6 Wash Buffer

Description: 10 time concentrated Wash buffer.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
Thimerosal	200-210-4	54-64-8	0.05%	T+, N	R26/27/28, R33, R50/53

Identification of Components Not Classified as Dangerous

This product contains the substances listed below, which are not defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Non Dangerous component	EINECS N°	CAS N°	Content (w eight percent)	EU Hazard Symbol Letter	R Phrases
Component B	None	None	Trade secret	None	None

3.7 Substrate Solution

Description: substrate for revelation step.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
Methylisothiazolin-3-one	220-239-6	2682-20-4	0.02%	T, N	R20/21/22, R34, R43, R50/53
3,3',5,5'-Tetramethylbenzidine	259-364-6	54827-17-7	0.036%	Xi	R36/37/38
Hydrogen peroxide	231-765-0	7722-84-1	<0.002%	Xn	R22, R41
Chloromethylisothiazolin-3-one	247-500-7	26172-55-4	< 0.01%	T, N	R20/21/22, R34, R43, R50/53

3.8 Stop Solution

Description: solution to stop the revelation step.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
Sulfuric acid	231-639-5	7664-93-9	1.96%	C	R35

3.9 Biotin-Antibody

Description: anti mouse leptin polyclonal antibody labelled with biotin, 10 times concentrated.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weigh t percent)	EU Hazard Symbol Letter	R Phrases
Methylisothiazolin-3-one	220-239-6	2682-20-4	0.02%	T, N	R20/21/22, R34, R43, R50/53
Bromonitrodioxane	250-001-7	30007-47-7	0.02%	Xn	R22, R38

3.10 Biotin-Antibody Buffer

Description: buffer for dilution of biotin labelled antibody, ready-to-use.

Identification of Dangerous Components

This product contains the substances listed below, which are defined as dangerous substances or hazardous chemicals as defined in European Community Directives 67/548/EEC or 1999/45/EC, and Hazard Communication Standard 29 CFR 1910.1200.

Dangerous component	EINECS N°	CAS N°	Content (weight percent)	EU Hazard Symbol Letter	R Phrases
Methylisothiazolin-3-one	220-239-6	2682-20-4	0.02%	T, N	R20/21/22, R34, R43, R50/53
Bromonitrodioxane	250-001-7	30007-47-7	0.02%	Xn	R22, R38

SECTION 4 – FIRST AID MEASURES

After Inhalation: If a person inhales large amounts of the product, move the exposed person to fresh air at once. If breathing is difficult or stops, seek immediate medical attention.

After Skin contact: If the product contacts the skin, immediately flush the contaminated skin with mild soap and water. If this chemical penetrates clothing immediately remove the clothing and flush the skin with water. Seek medical attention immediately.

After eye contact: If the product contacts the eyes, promptly wash (irrigate) the eyes with large amounts of tepid water for at least 15 minutes, occasionally lifting the lower and upper lids. Seek medical attention immediately.

After swallowing: wash out mouth with water provided person is conscious. Seek medical attention. Never give an unconscious person anything by mouth

Information for Doctor: Show the product label or this MSDS.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguishing media:

Suitable: water spray, carbon dioxide, dry chemical powder, or appropriate foam.

Special risks: None identified

Thermal decomposition: no thermal decomposition degradation products are expected

Specific hazard(s): None identified

Special protective equipment for fire-fighters: None identified

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Procedure(s) of personal precaution(s): wear suitable laboratory protective equipment lab coats, gloves and safety glasses.

Measure for Environmental protection: avoid penetration into sewerage systems, surface and ground water. Avoid soil pollution.

Methods for cleaning up: sweep up with suitable absorbing material, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

SECTION 7 – HANDLING AND STORAGE

Storage: keep tightly closed. Store at +4°C in a dark and dry place.

Handling: Seek appropriate training to safely handle this product under normal conditions. Use the recommended personal protective equipment (See Section 8) to prevent chemical exposures. Wash hands with soap and water before eating, drinking, or touching common items (phone, computer, etc.) to prevent cross contamination. Use this product with adequate ventilation. Do not breathe the vapour.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

General hygiene measures: do not eat, drink and smoke when working with the kit.

Engineering controls: Mechanical exhaust required.

Personal protective equipment:

Respiratory protection: none

Eye protection: chemical safety glasses, with side shields.

Hand protection: Compatible chemical-resistant gloves (wash your hands before and after work).

Body protection: protective clothing

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state (at +20°C):

Solid antibody precoated plate

Powder Lyophilized powder for Standard, Quality Control

Liquid EIA Buffer, Biotin-Antibody, Biotin-Antibody Buffer, Streptavidin-HRP Tracer, Wash buffer, Substrate (TMB) solution, Stop solution

Colour:

Caramel to reddish Streptavidin-HRP tracer

Yellowish Standard, Quality Control

Colourless antibody precoated plate, EIA Buffer, Biotin-Antibody, Biotin-Antibody Buffer, Wash buffer, Substrate (TMB) solution, Stop solution

Smell (odour): Odourless

pH value (at 25 °C): Stop solution : <1

other components : 6.8 - 7.4

Melting point (°C): No data available

Initial Boiling point (°C): No data available

Flash point (°C): No data available

Flammability: No data available

Vapour tension (°C): No data available

Solubility in water: Soluble.

Partition coefficient n-octanol/water: No data available

Auto-ignition temperature No data available

Decomposition temperature No data available

Viscosity No data available

SECTION 10 – STABILITY AND REACTIVITY

Stability: Product is stable under normal operating conditions and use as described in the product technical data sheet.

Conditions to be avoided: heat, light

Materials to avoid: Strong acids or bases, strong oxidizers, and extreme temperatures.

Hazardous decomposition products: Heating to decomposition temperature may produce carbon monoxide, carbon dioxide, nitrogen oxides.

Risk of hazardous reaction: No hazardous reaction known

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicology Data: Components contained in this kit are non-hazardous substances for health and environment in said concentrations. Toxicological information for this product as a whole does not exist, below is data for the individual components.

Acute Toxicity	Toxicity Test	Exposure route	Dose	Observed effect
No data available	No data available	No data available	No data available	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

Reproductive Toxicity: No data available

STOST-Single Exposure: No data available

STOST-Repeated Exposure: No data available

Aspiration Hazard: No data available

Carcinogenicity: Carcinogenetic information for this product as a whole does not exist. No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

Potential health effects

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

Ingestion Harmful if swallowed.

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

Eyes Causes eye burns.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties of each component of this product have not been thoroughly investigated.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity information for this product as a whole does not exist, below is data for the individual components

Persistence and degradability: No data available

Bioaccumulation: No data available

Mobility in the ground: No data available

Other adverse effects:

SECTION 13 – DISPOSAL CONSIDERATION

Substance disposal: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Contaminated packaging: Dispose the container in accordance with the international, federal, state and local requirements.

SECTION 14 – TRANSPORT INFORMATION

UN Number / Class / proper shipping name: Not listed, not dangerous goods.

Land Transport RID/ADR: as a mixture, the product is subject to no limitation for road transport.

Maritime Transport IMDG: as a mixture, the product is subject to no limitation for sea transport.

Air Transport IATA: as a mixture, the product is subject to no limitation for air transport.

Additional information: No additional information

SECTION 15 – REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Category of Danger

- T+ very toxic
- T toxic
- N dangerous for the environment
- Xi irritant
- Xn harmful
- C corrosive

Risk phrases:

- R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
- R22 Harmful if swallowed
- R26/27/28 very toxic by inhalation, in contact with skin, and if swallowed
- R33 danger of cumulative effects
- R34 causes burns
- R35 causes severe burns
- R36/37/38 irritating to eyes, respiratory system and skin
- R38 irritating to the skin
- R41 Risk of serious damage to eyes.
- R43 may cause sensitization by skin contact
- R50/53 very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Training advice: seek effective chemical handling training to reduce the hazards associated with this product prior to use.

SECTION 16 – OTHER INFORMATION

License granted to make unlimited paper copies for internal use only.

The material safety data sheet contains data necessary to ensure safety and health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a chemical mixture and can be solely used by persons with chemical education at their own risk.

This product is designed for research and development use only. Not for drug, household or other uses. The manufacturer has no responsibility for damage caused by unsuitable use and by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Pharma makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.