

Synaptic vesicle lysate

Cat.No. 504-LP2; , 50 µg tissue lysate

Data Sheet

Reconstitution/Storage	50 µg lysate in 1 X SDS PAGE loading buffer 'ready to use'. Total volume: 50 µl. Concentration: 1 mg/ml. Aliquot and store at -20°C until use.
Applications	WB: yes
Loading/lane	10-30 µg
Source	White Wistar
Remarks	Since several synaptic proteins aggregate after boiling, these lysates are unboiled. Boil sample before loading, if this is recommended for your protocol.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

In many cases the relative concentration of the protein of interest is high enough to use whole brain lysate for Western blot testing. If the concentration is less than 0.2% of total protein it may be difficult to distinguish signals from background noise. Since a lot of proteins are localized in distinct cellular compartments, subfractioning may overcome this problem. Fractions have been prepared according to our protocol. Protein concentration has been determined with a Bradford protein quantification assay.

Selected General References

Expression profile of PRAF2 in the human brain and enrichment in synaptic vesicles.
Koomoa DL, Go RC, Wester K, Bachmann AS
Neuroscience letters (2008) 436(2): 171-6.

Synapsin I (protein I), a nerve terminal-specific phosphoprotein. III. Its association with synaptic vesicles studied in a highly purified synaptic vesicle preparation.
Huttner WB, Schiebler W, Greengard P, De Camilli P
The Journal of cell biology (1983) 96(5): 1374-88.

The preparation and characterization of synaptic vesicles of high purity.
Nagy A, Baker RR, Morris SJ, Whittaker VP
Brain research (1976) 109(2): 285-309.

Identification of the preparation and of the company

Product name: rat brain (synaptic vesicle fraction (LP2))

Art. No.: 504-LP2

Application of the preparation: Laboratory chemical

Manufacturer/Supplier:

Synaptic Systems GmbH
Rudolf-Wissell-Straße 28
37079 Göttingen
Phone: +49 (0)551-50556-358
Fax: +49 (0)551-50556-384
E-mail: support@sysy.com

Information in case of emergency:

Giftinformation München
Phone: +49 (0)89 19240

Components:

Common Name	Classification	Art. No.
Sodium dodecyl sulphate	Xn R20/22, Xi R37/38-41	504-LP2
Mercaptoethanol	T R23-25, Xi 38-41 N R50/53	504-LP2

1. Identification of the preparation and of the company

Product name: rat brain (synaptic vesicle fraction (LP2))

Art. No.: 504-LP2

Amount: 50micrograms

Application of the preparation: Laboratory chemical

Manufacturer/Supplier:

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2. Information concerning particular hazards for human and environment:

This product is hazardous according to EEC directives 67/548/EEC and 1999/45/EC.

T; Toxic

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

Xi; Irritant

R38-41: Irritating to skin. Risk of serious damage to eyes.

Xn; harmful

R20/22: harmful in contact with skin and if swallowed.

N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS label elements



Signal word: Danger

Hazard statements

H302	Harmful if swallowed.
H311+H331	Toxic in contact with skin or if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P280	Wear protective gloves / eye protection / face protection.
P273	Avoid release to the environment.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P301+P312	IF SWALLOWED: Call a poison center or physician if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well ventilated place. Keep container tightly closed.

Additional information:

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

3. Composition/information on ingredients

Chemical characterization

Description: Aqueous solution.

Dangerous components:

CAS No. 151-21-3 Sodium Dodecyl sulphate >1% (3.0%)

CAS No. 6-24-2 Mercaptoethanol >1% (3.3%)

4. First-aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air and to be sure call for a doctor.

After skin contact: Immediately wash off with soap and plenty of water. If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for 15 minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth and drink a glass of water. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

5. Fire-fighting measures

Suitable extinguishing agents:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards caused by the substance, its products of combustion or resulting gases:

Decomposition products may include carbon oxides, Hydrogen sulfide and Sulphur oxide.

Protective equipment:

Wear self-contained respiratory protective device. Wear fully protective suit.

6. **Accidental release measures**

Person-related safety precautions: Wear protective clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Measures for environmental protection: Do not allow to enter sewers/surface or ground water.

Measures for cleaning/collecting: Soak up with inert absorbent material.

7. **Handling and storage**

Information for safe handling: Handling corresponding to laboratory safety guidelines. Work in fume cupboard. Ensure good ventilation.

Information about fire - and explosion protection: No special measures required.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Store away from foodstuffs.

Further information about storage conditions: Storage temperature: -20 °C

8. **Exposure controls/personal protection**

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Respiratory protection: Required when vapours/aerosols are generated.

Protection of hands: Handle with gloves.

Eye protection: Tightly sealed goggles

Body protection: Protective work clothing

9. **Physical and chemical properties**

General Information

Form: viscous liquid

Colour: Blue.

Odour: Hydrogen sulfide, characteristic

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

Self-igniting: Product is not self-igniting.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined.

Solubility in / Miscibility with water: Soluble.

10. **Stability and reactivity**

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Materials to be avoided:

Strong oxidizing agents.

Dangerous decomposition products:

Hazardous decomposition products formed under fire conditions. – Carbon oxides, Sulphur oxides

11. Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Mercaptoethanol

Oral LD50 98-168 mg/kg (rat)

Dermal LD50 167mg/kg (rabbit)

Inhalative LC50/4h ~2mg/l (rat (ECHA))

Primary irritant effect:

on the skin: irritant to skin and mucous membranes

on the eye: Risk of corneal opacity, strongly irritant danger of severe eye injury

after inhalation: Irritating, coughing, dyspnoea

Sensitization: No sensitizing effects known.

Further information:

The product should be handled with the care usual when dealing with chemicals.

Sodium Dodecyl Sulphate

Oral LD50 1427 mg/kg (rat)

Dermal LD50 580 mg/kg (rabbit)

Primary irritant effect:

on the skin: irritant to skin and mucous membranes

on the eye: Risk of corneal opacity, strongly irritant danger of severe eye injury

after inhalation: Irritating, coughing, dyspnoea

Sensitization: No sensitizing effects known.

Further information:

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Ecotoxicological effects

Acquatic toxicity:

Mercaptoethanol

LC50 values relevant for classification:

Fish: 37mg/l/96h

Daphnia: 0,4mg/l/48h

Algal: 12mg/l/72h

Sodium Dodecyl Sulphate

Fish: 4,5mg/l/96h

Daphnia: 6mg/l/48h

Algal: 53mg/l/72h

13. Disposal considerations

Product: This material and its container must be disposed of as hazardous waste.

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

Uncleaned packaging: Disposal according to official regulations.

14. Transport information

Land transport ADR/RID (cross-border) Not subject to transport regulations.

Maritime transport IMDG: Not dangerous goods.

Air transport ICAO-TI and IATA-DGR: Not dangerous goods.

15. Regulatory information

Labelling according to EU guidelines:

Hazard symbols: Xi – Irritant

Risk-Phrase: R41 – Risk of serious damage to eyes.

Safety-Phrase: S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39 – Wear eye/face protection.

National regulations:

Waterhazard class: WGK2 – Hazardous for water.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Department: Research and Development

Contact: Herr Dr. Martens

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals