

Recombinant Mouse NPTN Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51513

Size: 10ug, 100ug

Protein Name: Neuropilin (Stromal cell-derived receptor 1) (SDR-1)

Synonym: Nptn, Sdfr1, Sdr1

UniProt ID: P97300

UniProt Link: www.uniprot.org/uniprotkb/P97300/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 397 AA

Molecular Weight: 44 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSGSSLP GALALSLLL VSGSLLPGPGAAQNAGFVKSPMSETKLTGDAFELYCDVVGSP TPEIQWWY
AEVNRAESFRQLWDGARKRRVT VNTAYGSNGVSVLRITRLTLEDSGTYECRASNDPKRNDLRQNP
SITWIRAQATISVLQKPRIVTSEEVIRESLLPVT LQC NL TSSSHTLMYSYWTRNGVELTATRKNASNM
EYRINKPRAEDSGEYHCYHFVSAPKANATIEVKAAPDITGHKRSENKNEGQDAMMYCKSVGYPHP
EWIWRKKENGVFEEISNSSGRFFITNKENYTELSIVNLQITEDPGEYECNATNSIGSASVSTVLRVRS
HLAPLWPFLGILAEIILVVIIVVYEKRKR PDEVPDDDEPAGPMKTNSTNNHKDKNL RQRNTN

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Neuroplastin (Stromal cell-derived receptor 1) (SDR-1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Accessory subunit of plasma membrane calcium-transporting ATPase ATP2B2/PMCA2 that stabilizes the transporter at the cell surface (PubMed:40836084). Also acts as a chaperone for ATP2B1; stabilizes ATP2B1 and increases its ATPase activity (PubMed:28827723). Probable homophilic and heterophilic cell adhesion molecule involved in long term potentiation at hippocampal excitatory synapses through activation of p38MAPK (By similarity). May also regulate neurite outgrowth by activating the FGFR1 signaling pathway (By similarity). May play a role in synaptic plasticity (By similarity). Promotes localization of XKR8 at the cell membrane (By similarity).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein .; [Isoform 2]: Postsynaptic density .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.