

Recombinant Mouse SPP2A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51926

Size: 10ug, 100ug

Protein Name: Signal peptide peptidase-like 2A (SPP-like 2A) (SPPL2a) (EC 3.4.23.-) (Intramembrane protease 3) (IMP-3) (Presenilin-like protein 2)

Synonym: Sppl2a, Imp3, Psl2, MNCb-3763

UniProt ID: Q9JJF9

UniProt Link: www.uniprot.org/uniprotkb/Q9JJF9/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 523 AA

Molecular Weight: 58 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGLLHSLHAPAAALLWSCLLGLAAQEAAILHASTNGVSSLSKDYCMYYNNNWTRLPSSLENATSLSL
MNLGTALCHLSDIPPDGIRNKAVVVHWGPCHFLEKARIAQEGGAAALLIANNVLIPLSSRNKSTFQN
VTVLIAVITQKDFKDMKETLGDDITVKMYSWPNFDYTLVVIFVIAVFTVALGGYWSGLIELENMKSV
EDAEDRETRKKKDDYLTFSPLTVVVFVVICCIMIVLLYFFYRWLVYVMIAIFCIASSMSLYNCLSALIHR
MPCGQCTILCCGKNIVSLIFLSGLCISVAVVWAVFRNEDRWAWILQDILGIAFCLNLIKTMKLPNFMS
CVILLGLLLIYDVFFVFITPFITKNGESIMVELAAGPFENAEKLPVVIRVPKLMGYSVMSVCSVPVSVLG
FGDIIVPGLLIAYCRRFDVQTGSSIIYISSTIAYAVGMIITFVLMVMKGTGPALLYLPCTLITVSVVAW
SRKEMKKFWKGSSYQVMDHLDYSTNEENPVTTDEQIVQQ

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 Signal peptide peptidase-like 2A (SPP-like 2A) (SPPL2a) (EC 3.4.23.-) (Intramembrane protease 3) (IMP-3) (Presenilin-like protein 2) 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: Intramembrane-cleaving aspartic protease (I-CLiP) that cleaves type II membrane signal peptides in the hydrophobic plane of the membrane. Functions in FASLG, ITM2B and TNF processing. Catalyzes the intramembrane cleavage of the anchored fragment of shed TNF (TNF), which promotes the release of the intracellular domain (ICD) for signaling to the nucleus. Also responsible for the intramembrane cleavage of Fas antigen ligand FASLG, which promotes the release of the intracellular FasL domain (FasL ICD). Essential for degradation of the invariant chain CD74 that plays a central role in the function of antigen-presenting cells in the immune system. Plays a role in the regulation of innate and adaptive immunity.

Subcellular Localization: Late endosome membrane ; Multi-pass membrane protein . Lysosome membrane ; Multi-pass membrane protein . Membrane ; Multi-pass membrane protein ; Luminal side . Note=Colocalizes with palmitoylated and myristoylated proteins at the plasma membrane.

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.