

Recombinant Rat JPH4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52703

Size: 10ug, 100ug

Protein Name: Junctophilin-4 (JP-4) (Junctophilin-like 1 protein)

Synonym: Jph4, Jphl1

UniProt ID: Q69FB3

UniProt Link: www.uniprot.org/uniprotkb/Q69FB3/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 630 AA

Molecular Weight: 66 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MHVPLGRKFDFDDGGCYVGGWEAGRAHGYGVCTGPGAQGEYSGCWAHGFESLGVFTGPGGHSY
QGHWQQGKREGLGVERKSRWYRGEWLGLKGRSGVWESVSLRYAGLWKDGFQDGYGTETY
SDGGTYQQGWQAGKRHGYGVRQSVYPYHQAALLRSPRRTSLDSGHSDPPTPPPPLPLPGDEGGSP
ASGSRGGFVLAPGDADGASSRKRTPAAGGFFRRSLLSGLRAGGRRSSLGSKRGLRSEVSSEV
GSTGPPGSEASGPPIPAPPALIEGSATEVYAGEWRADRRSGYGVVSQRSNGLRYEGEWLGNRRHGY
GRTTRPDGSREEGKYKRNRLVHGGRVRSLLPLALRRGKVKEKVDRAVEGARRAVSAARQRQEIAA
ARAADALLKAVAASSVAEKAVEAARMAKLIQDLQPMLEAPGRRPRQDSGGSDTEPLDEDSPGVYE
NGLTPSEGSPPELSSPASSHQPWAPPSCRPLPPGGNWGPFSSPKAWPEEWGGPGEQAEELAGY
EADEEAGMQGPGPRDGSPLLGGCSDSSGSLREEEGEDEESLPQLRAPGGSESEPVTTTPVLRGLSS
RGPDAGCLTEEFEEPAATERPAQPGAANPLVVGAVALLDLSLAFLFSQLLT

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 Junctophilin-4 (JP-4) (Junctophilin-like 1 protein) 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: Junctophilins contribute to the formation of junctional membrane complexes (JMCs) which link the plasma membrane with the endoplasmic or sarcoplasmic reticulum in excitable cells. Provides a structural foundation for functional cross-talk between the cell surface and intracellular calcium release channels. JPH4 is brain-specific and appears to have an active role in certain neurons involved in motor coordination and memory (By similarity).

Subcellular Localization: Cell membrane ; Peripheral membrane protein . Endoplasmic reticulum membrane ; Single-pass type IV membrane protein . Note=Localized predominantly on the plasma membrane. The transmembrane domain is anchored in endoplasmic reticulum membrane, while the N-terminal part associates with the plasma membrane (By similarity).

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.