

Recombinant Human SH21B Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50888

Size: 10ug, 100ug

Protein Name: SH2 domain-containing protein 1B (EWS/FLI1-activated transcript 2) (EAT-2)

Synonym: SH2D1B, EAT2

UniProt ID: O14796

UniProt Link: www.uniprot.org/uniprotkb/O14796/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 132 AA

Molecular Weight: 15 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDLPYYHGRLTKQDCETLLKKEGVDGNFLLRDSESI PGVLCLCVSFKNIVYTYRIFREKHGYYRIQTA
EGSPKQVFPSELKELISKFEKPNQGMVVHLLKPIKRTSPSLRWRGLKLELET FVNSNSDYVDVLP

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 SH2 domain-containing protein 1B (EWS/FLI1-activated transcript 2) (EAT-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: Cytoplasmic adapter regulating receptors of the signaling lymphocytic activation molecule (SLAM) family such as CD84, SLAMF1, LY9 and CD244 (PubMed:11689425). In SLAM signaling seems to cooperate with SH2D1A/SAP. Plays a role in regulation of effector functions of natural killer (NK) cells by controlling signal transduction through CD244/2B4 without effecting its tyrosine phosphorylation; downstream signaling involves PLCG1 and ERK activation (PubMed:24687958). Activation of SLAMF7-mediated NK cell function does not effect receptor tyrosine phosphorylation but distal signaling (By similarity). In the context of NK cell-mediated cytotoxicity does not enhance conjugate formation with target cells but stimulates polarization of the microtubule-organizing center and cytotoxic granules toward the NK cell synapse (PubMed:24687958). Negatively regulates CD40-induced cytokine production in dendritic cells downstream of SLAM family receptors probably by inducing activation of the PI3K pathway to inhibit p38 MAPK and JNK activation (By similarity).

Subcellular Localization: N/A

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.