

Recombinant Human S1PR4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50867

Size: 10ug, 100ug

Protein Name: Sphingosine 1-phosphate receptor 4 (S1P receptor 4) (S1P4) (Endothelial differentiation G protein-coupled receptor 6) (Sphingosine 1-phosphate receptor Edg-6) (S1P receptor Edg-6)

Synonym: S1PR4, EDG6

UniProt ID: O95977

UniProt Link: www.uniprot.org/uniprotkb/O95977/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 384 AA

Molecular Weight: 42 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNATGTPVAPESCQQLAAGGHSRLIVLHYNHSGRLAGRGGPEDGGLGALRGLSVAASCLVVLENLL
VLAATSHMRSRRWVYYCLVNITLSDLLTGAAYLANVLLSGARTFRLAPAQWFLREGLLFTALAASTF
SLLFTAGERFATMVRPVAESGATKTSRVYGFILGCWLLAALLGMLPLLGWNCLEAFDRCSSLLPLYS
KRYILFCLVIFAGVLATIMGLYGAI FRLVQASGQKAPRPAARRKARRLLKTVLMILLAFLVCWGPLFGLL
LADVFGSNLWAQEYLRGMDWILALAVLNSAVNPPIYSFRSREVCRAVLSFLCCGCLRLGMRGPGDCL
ARAVEAHSGASTTDSSLRPRDSFRGSRSLSFRMREPLSSISSVRSI

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 Sphingosine 1-phosphate receptor 4 (S1P receptor 4) (S1P4) (Endothelial differentiation G protein-coupled receptor 6) (Sphingosine 1-phosphate receptor Edg-6) (S1P receptor Edg-6) 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: G protein-coupled receptor highly expressed in immune cells, where it regulates immune response and cytokine production. Functions as a receptor for the lysosphingolipid sphingosine-1-phosphate (S1P). Upon S1P binding, promotes regulatory T-cell differentiation and enhances fatty acid oxidation, through activation of the NRF2/PPARA signaling pathway (By similarity). Modulates also M1 macrophage activation through interaction with FPR2 and the JNK signaling, contributing to the inflammatory response (By similarity). In addition, facilitates early neutrophil mobilization and vascular activation during inflammation, promoting lymphocyte recruitment to draining lymph nodes and supporting the development of germinal centers for an effective adaptive immune response (By similarity).

Subcellular Localization: Cell membrane; Multi-pass membrane protein.

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.