

Recombinant Mouse CD226 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51789

Size: 10ug, 100ug

Protein Name: CD226 antigen (Platelet and T-cell activation antigen 1) (CD antigen CD226)

Synonym: Cd226, Pta1

UniProt ID: Q8K4F0

UniProt Link: www.uniprot.org/uniprotkb/Q8K4F0/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 333 AA

Molecular Weight: 38 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAYVTWLLAILHVHKALCEETLWDTTVRLSETMTLECVYPLTHNLTQVEWTKNTGKTQVSIQVYNPN
HNMHIESNYLHRVHFLNSTVGFRNMSLSFYNAEADIGIYSCLFHAFNGPWEEKIKVWSDSFEIAA
PSDSYLSAEPGQDVTLCQLPRTWPVQQVIWEKVQPHQVDILASCNLSQETRYTSKYLRQTRSNCS
QGSMKSILIPNAMAADSGLYRCRSEAITGKNKSFVIRLIITDGGTNKHFILPIVGGLVSLLLVILIIIFILYN
RKRRRQVRIPLKEPRDKQSKVATNCRSPTSPIQSTDDEKEDIYVNYPTFSRRPKPRL

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 CD226 antigen (Platelet and T-cell activation antigen 1) (CD antigen CD226) 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: Cell surface receptor that plays an important role in the immune system, particularly in intercellular adhesion, lymphocyte signaling, cytotoxicity and lymphokine secretion mediated by cytotoxic T-cells and NK cells (PubMed:19029379, PubMed:24658051, PubMed:26552706). Functions as a costimulatory receptor upon recognition of target cells, such as virus-infected or tumor cells. Upon binding to its ligands PVR/CD155 or NECTIN2/CD112 on target cells, promotes the cytotoxic activity of NK cells and CTLs, enhancing their ability to kill these cells (PubMed:30591568). Mechanistically, phosphorylation by Src kinases such as LYN or FYN, enables binding to adapter GRB2, leading to activation of VAV1, PI3K and PLCG1. Promotes also activation of kinases ERK and AKT, as well as calcium fluxes (By similarity).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein . Note=Localizes to lipid rafts.

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.