

Recombinant Human CD7 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50162

Size: 10ug, 100ug

Protein Name: T-cell antigen CD7 (GP40) (T-cell leukemia antigen) (T-cell surface antigen Leu-9) (TP41) (CD antigen CD7)

Synonym: CD7

UniProt ID: P09564

UniProt Link: www.uniprot.org/uniprotkb/P09564/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 240 AA

Molecular Weight: 25 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAGPPRLLLLPLLLALARGLPALAAQEVQQSPHCTTVPGASVNITCSTSGGLRGIYLRQLGPQPQ
DIYYEDGVPTTDRRFRGRIDFSGSQDNLITMHLRLQLSDTGTYTCQAITEVNVYGSGLVTVTEEQ
SQGWHRCSDAPPRASALPAPPTGSALPDQTASALPDPPAASALPAALAVISFLLGLGLGVACVLAR
TQIKKLCSWRDKNSAACVVYEDMSHSRCNTLSSPNQYQ

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 T-cell antigen CD7 (GP40) (T-cell leukemia antigen) (T-cell surface antigen Leu-9) (TP41) (CD antigen CD7) 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: Transmembrane glycoprotein expressed by T-cells and natural killer (NK) cells and their precursors (PubMed:7506726). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:10652336). In turn, mediates the production of cytokines such as IL-2 (PubMed:1709867). On resting NK-cells, CD7 activation results in a significant induction of interferon-gamma levels (PubMed:7506726).

Subcellular Localization: Membrane; Single-pass type I 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.