

Recombinant Human DAF Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50249

Size: 10ug, 100ug

Protein Name: Complement decay-accelerating factor (CD antigen CD55)

Synonym: CD55, CR, DAF

UniProt ID: P08174

UniProt Link: www.uniprot.org/uniprotkb/P08174/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 381 AA

Molecular Weight: 41 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTVARPSVPAALPLLGELPRLLLLVLLCLPAVWGDCLPPDVPNAQPALEGRTSFPEDTVITYKCEES
FVKIPGEKDSVICLKGSQWSDIEEFCNRSCEVPTRLNSASLKQPYITQNYFPVGTVVEYECRPGYRR
EPSLSPKLTCLQNLKWSTAVEFCKKKSCPNPGEIRNGQIDVPGILFGATISFSCNTGYKLFGSTSSF
CLISGSSVQWSDPLPECREIYCPAPPQIDNGIIQGERDHYGYRQSVTYACNKGFTMIGEHSIYCTVNN
DEGEWSGPPPECRGKSLTSKVPPTVQKPTTVNVPTTEVSPTSQKTTTKTTTPNAQATRSTPVSRTT
KHFHETTPNKGSGTTS GTTRLLSGHTCFTLTGLLGTLVTMGLLT

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 Complement decay-accelerating factor (CD antigen CD55) 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: This protein recognizes C4b and C3b fragments that condense with cell-surface hydroxyl or amino groups when nascent C4b and C3b are locally generated during C4 and C3 activation. Interaction of daf with cell-associated C4b and C3b polypeptides interferes with their ability to catalyze the conversion of C2 and factor B to enzymatically active C2a and Bb and thereby prevents the formation of C4b2a and C3bBb, the amplification convertases of the complement cascade (PubMed:7525274). Inhibits complement activation by destabilizing and preventing the formation of C3 and C5 convertases, which prevents complement damage (PubMed:28657829).; (Microbial infection) Acts as a receptor for Coxsackievirus A21, coxsackieviruses B1, B3 and B5.; (Microbial infection) Acts as a receptor for Human enterovirus 70 and D68 (Probable).; (Microbial infection) Acts as a receptor for Human echoviruses 6, 7, 11, 12, 20 and 21.

Subcellular Localization: [Isoform 1]: Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Cell membrane; Lipid-anchor, GPI-anchor.; [Isoform 3]: Secreted .; [Isoform 4]: Secreted .; [Isoform 5]: Secreted .; [Isoform 6]: Cell membrane ; Lipid-anchor, GPI-anchor .; [Isoform 7]: Cell membrane ; Lipid-anchor, GPI-anchor .

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.