

Recombinant Rat FKBP1A Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52481

Size: 10ug, 100ug

Protein Name: Peptidyl-prolyl cis-trans isomerase FKBP1A (PPIase FKBP1A) (EC 5.2.1.8) (12 kDa FK506-binding protein) (12 kDa FKBP) (FKBP-12) (FK506-binding protein 1A) (FKBP-1A) (Immunophilin FKBP12) (Rotamase)

Synonym: Fkbp1a, Fkbp1

UniProt ID: Q62658

UniProt Link: www.uniprot.org/uniprotkb/Q62658/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 108 AA

Molecular Weight: 12 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGVQVETISSGDGRTPKRGQTCVVHYTGMLDGGKKFDSSDRNKPFKFTLGKQEVIRGWEEGVA
QMSVGQRAKLIISPDYAYGATGHPGIIPPHATLVFDVELLKLE

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 Peptidyl-prolyl cis-trans isomerase FKBP1A (PPlase FKBP1A) (EC 5.2.1.8) (12 kDa FK506-binding protein) (12 kDa FKBP) (FKBP-12) (FK506-binding protein 1A) (FKBP-1A) (Immunophilin FKBP12) (Rotamase) 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: Keeps in an inactive conformation TGFBR1, the TGF-beta type I serine/threonine kinase receptor, preventing TGF-beta receptor activation in absence of ligand. Recruits SMAD7 to ACVR1B which prevents the association of SMAD2 and SMAD3 with the activin receptor complex, thereby blocking the activin signal. May modulate the RYR1 calcium channel activity. PPlases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides (By similarity).

Subcellular Localization: Cytoplasm, cytosol . Sarcoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side .

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.