

Recombinant Rat TRAF6 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52183

Size: 10ug, 100ug

Protein Name: TNF receptor-associated factor 6 (EC 2.3.2.27) (E3 ubiquitin-protein ligase TRAF6) (RING-type E3 ubiquitin transferase TRAF6)

Synonym: Traf6

UniProt ID: B5DF45

UniProt Link: www.uniprot.org/uniprotkb/B5DF45/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 530 AA

Molecular Weight: 60 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSLLNCENSCASSQSSSDCCAAMANSCSAAMKDDSVSGCVSTGNLSSSFMEEIQGYDVEFDPPLE
SKYECPICLMALREAVQTPCGHRFCKACITKSIRDAGHKCPVDNEILLENQLFPDNFAKREILSLTVKC
PNKGCVCQKMLRHLEDHQVHCEFALVICPQCQRFFQKQCQINKHIIEDCPRRQVSCVNCVPMPLYEE
KEIHDQSCPLANIICEYCGTILIREQMPNHYDLDCPTAPVPCTFSVFGCHEKMQRNHLARHLQENTQL
HMRLLAQAVHNVNLSLRPCDASSPSRGCRPEDPNYEETVKQLEGRLVRQDQHQIRELTAKMETQSM
HVSELKRTIRSLEDKVAEMEAQQCNGIYWKIGNFGMHLKSQEEERPVIHSPGFYTGRPGYKLCMR
LHLQLPTAQRCANYISLFVHTMQGEYDShLPWPFQGTIRLTILDQSEAVIRQNHEEVMDAKPELLAFQ
RPTIPRNPKGFGYVTFMHLEALRQGTFIKDDTLLVRCEVSTRFDMGGLRKEGFQPRSTDAGV

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 TNF receptor-associated factor 6 (EC 2.3.2.27) (E3 ubiquitin-protein ligase TRAF6) (RING-type E3 ubiquitin transferase TRAF6) 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: E3 ubiquitin ligase that, together with UBE2N and UBE2V1, mediates the synthesis of 'Lys-63'-linked-polyubiquitin chains conjugated to proteins, such as ECSIT, IKBKG, IRAK1, AKT1 and AKT2. Also mediates ubiquitination of free/unanchored polyubiquitin chain that leads to MAP3K7 activation. Leads to the activation of NF-kappa-B and JUN (By similarity). Seems to also play a role in dendritic cells (DCs) maturation and/or activation (By similarity). Represses c-Myb-mediated transactivation, in B-lymphocytes. Adapter protein that seems to play a role in signal transduction initiated via TNF receptor, IL-1 receptor and IL-17 receptor (By similarity). Regulates osteoclast differentiation by mediating the activation of adapter protein complex 1 (AP-1) and NF-kappa-B, in response to RANK-L stimulation (By similarity). Together with MAP3K8, mediates CD40 signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production (By similarity). Acts as a regulator of the JNK and NF-kappa-B signaling pathways by initiating assembly of heterotypic 'Lys-63'-'Lys-48'-linked branched ubiquitin chains that are then recognized by TAB2: TRAF6 catalyzes initial 'Lys-63'-linked-polyubiquitin chains that are then branched via 'Lys-48'-linked polyubiquitin by HUWE1. 'Lys-63'-'Lys-48'-linked branched ubiquitin chains protect 'Lys-63'-linkages from CYLD deubiquitination. Also participates in the TCR signaling by ubiquitinating LAT (By similarity).

Subcellular Localization: Cytoplasm . Cytoplasm, cell cortex . Nucleus . Lipid droplet .
Note=RSAD2/viperin recruits it to the lipid droplet.

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.