

Recombinant Mouse TLR5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51937

Size: 10ug, 100ug

Protein Name: Toll-like receptor 5

Synonym: Tlr5

UniProt ID: Q9JLF7

UniProt Link: www.uniprot.org/uniprotkb/Q9JLF7/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 859 AA

Molecular Weight: 98 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MACQLDLLIGVIFMASPVLVISPCSSDGRIAFFRGCNLTQIPWILNTTTERLLLSFNYISMVVATSFPLLE
RLQLLELGTQYANLTIGPGAFRNLPNLRILDGQSQIEVLNRDAFQGLPHLLELRLFSCGLSSAVLSDG
YFRNLYSLARLDLSGNQIHSLRLHSSFRELNSLSDVNFAFNQIFTICEDELEPLQGKTLSTFFGLKLTCL
FSRVSVGWETCRNPFRGVRLETLDLSENGWTVDTITRNFNIIQGSQISSILKHHIMGPGFGFQNIIRD
PDQSTFASLARSSVLQLDLSHGFIFSLNPRLFGTLKDLKMLNLAFNKINKIGENAFYGLDSLQVLNLSY
NLLGELYNSNFYGLPRVAYVDLQRNHIGIIQDQTFRLLKTLQTLDLRDNALKAIGFIPSIQMVLLGGNKL
VHLPHIHFTANFLELSENRLNLSLYFLLRVPQLQFLILNQNRLLSSCKAAHTPSENPSLEQLFTENM
LQLAWETGLCWDVFQGLSRLQILYLSNNYLNFLPPGIFNDLVALRMLSLSANKLTVLSPGSLPANLEIL
DISRNQLLCPDPALFSSRLVLDITHNEFVCNCELSTFISWLNQTNVTLFGSPADVYCMYPNSLLGGSL
YNISTEDCDEEEAMRSLKFSLFILCTVTLTLFLVITLVVIKFRGICFLCYKTIQKLVFKDKVWSLEPGAYR
YDAYFCFSSKDFEWAQNALLKHLDAHYSSRNRLRLCFEERDFIPGENHISNIQAAVWGSRKTVCLVS
RHFLKDGWCLEAFRYAQSRLSDLKSILIVVVVGSLSQYQLMRHETIRGFLQKQQLRWPEDLQDV
GWFLDKLSGCILKEEKGGKKRSSSIQLRTIATIS

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 Toll-like receptor 5 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: Pattern recognition receptor (PRR) located on the cell surface that participates in the activation of innate immunity and inflammatory response. Recognizes small molecular motifs named pathogen-associated molecular pattern (PAMPs) expressed by pathogens and microbe-associated molecular patterns (MAMPs) usually expressed by resident microbiota. Upon ligand binding such as bacterial flagellins, recruits intracellular adapter proteins MYD88 and TRIF leading to NF-kappa-B activation, cytokine secretion and induction of the inflammatory response. Plays thereby an important role in the relationship between the intestinal epithelium and enteric microbes and contributes to the gut microbiota composition throughout life.

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.