

Recombinant Mouse MYD88 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51321

Size: 10ug, 100ug

Protein Name: Myeloid differentiation primary response protein MyD88

Synonym: Myd88

UniProt ID: P22366

UniProt Link: www.uniprot.org/uniprotkb/P22366/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 296 AA

Molecular Weight: 34 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSAGDPRVGSGLDSFMFSIPLVALNVGVRRRLSLFLNPRTTPVAADWTLLAEEMGFLEYLEIRELETR
PDPTRSLDDAWQGRSGASVGRLLLELLALLDREDILKELKSRIEEDCQKYLKGKQQNQSEKPLQVARV
ESSVPQTKELGGITTLDDPLGQTPELFDAFICYCPNDIEFVQEMIRQLEQTDYRLKLCVSDRDVLPGT
CVWSIASELIEKRCRRMVVVVSDDYLSKECDFQTKFALSLSPGVQQKRLIPIKYKAMKKDFPSILRFI
TICDYTNPCTKSWFWTRLAKALSLP

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 Myeloid differentiation primary response protein MyD88 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: Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response (PubMed:9697844). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:9575168, PubMed:9697844). Increases IL-8 transcription. Involved in IL-18-mediated signaling pathway (PubMed:9697844). Activates IRF1 resulting in its rapid migration into the nucleus to mediate an efficient induction of IFN-beta, NOS2/INOS, and IL12A genes (PubMed:17018642). Upon TLR8 activation by GU-rich single-stranded RNA (GU-rich RNA) derived from viruses, induces IL1B release through NLRP3 inflammasome activation (By similarity). MyD88-mediated signaling in intestinal epithelial cells is crucial for maintenance of gut homeostasis and controls the expression of the antimicrobial lectin REG3G in the small intestine (PubMed:17635956, PubMed:21998396). Mediates leukocyte recruitment at the inflammatory site (PubMed:18941239).; [Isoform 2]: Defective in its ability to induce IRAK phosphorylation and NF-kappa-B activation and can function as a negative regulator of activation by IL-1 or lipopolysaccharide (LPS).

Subcellular Localization: Cytoplasm . Nucleus .

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.