

Recombinant Rat MEFV Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52582

Size: 10ug, 100ug

Protein Name: Pyrin

Synonym: Mefv

UniProt ID: Q9JJ25

UniProt Link: www.uniprot.org/uniprotkb/Q9JJ25/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 747 AA

Molecular Weight: 84 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MANTRVDHLLNTLEELLPYELEKFKFKLHTTSLEKGHSRIPLSLVKMARPIKLTRLLLTYYGEEYAVRL
TLQILRATNQRQLAEELHKATGPEHLTEENGVGGSVQSSAENKDKGVKGSVDVPGEDEAQQNDDDES
DILPPIQAEVKGKGPQKKS LAKRKDQRGPESLDSQTKPGARSAAPLYRRTLVTQSPGDKENRAGAQP
QECQLCREAARSTAMSQGGERSRRLKCICLQERSDPGV LKLPLTQKKENPQIQKLFRLKRKQEMAV
SFVREATLNGRTTG TLEKGVGIPEHSMMLDEETS RNMSSKISLTREKRCTASWTENGNGGPETPET
LGETVSSILCDSCSPKVLLSLGEKLAQTPEDPASLGQAASKGRSRDKVACPLCHTQGELPAKACVQS
SCSCSVAPGDPKASGRHSICFQCQSSRAGKSCEAQSPQFLPQCPRHMKQVQLLFCEDHREPICLIC
RLSQEHQGHVRPIEEAALQYKEQIRKQLERLREMRGYVEEHKLPADKKAEDFLKQTETQKQRISCP
LEKLFQFLEQQEQLFVTWLQELVQTIGKVRETYTQVSLLDKLIGELEAKQDQPEWELMQDIGATLH
RAETMTASELLGIPPGVKEKLHLLYQKSKSAEKNMQRFSEMLGSEMAFSASDVATREGCRPSTTKA
QALIPTVHLKCDGAHTQDFDVILCAELEAGGSEPQDYLHPSSAQDTPELHEIHSQNNKRKFKSFLKW
KPSFSRTDRCLRTCW

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 Pyrin 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: Involved in the regulation of innate immunity and the inflammatory response in response to IFNG/IFN-gamma. Organizes autophagic machinery by serving as a platform for the assembly of ULK1, Beclin 1/BECN1, ATG16L1, and ATG8 family members and recognizes specific autophagy targets, thus coordinating target recognition with assembly of the autophagic apparatus and initiation of autophagy. Acts as an autophagy receptor for the degradation of several inflammasome components, including CASP1, NLRP1 and NLRP3, hence preventing excessive IL1B- and IL18-mediated inflammation. However, it can also have a positive effect in the inflammatory pathway, acting as an innate immune sensor that triggers PYCARD/ASC specks formation, caspase-1 activation, and IL1B and IL18 production (By similarity). Together with AIM2, also acts as a mediator of pyroptosis, necroptosis and apoptosis (PANoptosis), an integral part of host defense against pathogens, in response to bacterial infection (By similarity). It is required for PSTPIP1-induced PYCARD/ASC oligomerization and inflammasome formation. Recruits PSTPIP1 to inflammasomes, and is required for PSTPIP1 oligomerization (By similarity).

Subcellular Localization: Cytoplasm, cytoskeleton . Cell projection, ruffle . Cell projection, lamellipodium . Cytoplasm . Cytoplasmic vesicle, autophagosome . Nucleus . Note=Associated with microtubules and with the filamentous actin of perinuclear filaments and peripheral lamellar ruffles. In pre-apoptotic cells, colocalizes with PYCARD/ASC in large specks (pyroptosomes). In migrating monocytes, strongly polarized at the leading edge of the cell where it colocalizes with polymerizing actin and PYCARD/ASC (By similarity).

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.