

Recombinant Human MEFV Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50665

Size: 10ug, 100ug

Protein Name: Pyrin (Marenostrin)

Synonym: MEFV, MEF, TRIM20

UniProt ID: O15553

UniProt Link: www.uniprot.org/uniprotkb/O15553/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 781 AA

Molecular Weight: 86 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAKTPSDHLLSTLEELVPYDFEKFKFLQNTSVQKEHSRIPRSQIQRARPVKMATLLVTYYGEEYAV
QLTLQVLRRAINQRLLAEELHRAAIQEYSTQENGTDSSAASSSLGENKPRSLKTPDHPEGNEGNGPRP
YGGGAASLRCSQPEAGRGLSRKPLSKRREKASEGLDAQGKPRTRSPALPGGRSPGPCRALEGGQ
AEVRLRRNASSAGRLQGLAGGAPGQKECRPFVYLPYGKMRPRSLEVTISTGEKAPANPEILLTLEE
KTAANLDSATEPRARPTPDGGASADLKEGPGNPEHSVTGRPPDTAASPRCHAEQGDVPDGTCTVRD
SCSFPEAVSGHPQASGSRSPGCPRCQDSHERKSPGSLSPQPLPQCKRHLKQVQLLFCEDHDEPIC
LICSLSQEHQGHRVRPIEEVALEHKKKIQQKLEHLKLRKSGEEQRSYGEEKAVSFLKQTEALKQRV
QRKLEQVYYYFLEQQEHFFVASLEDVGMVGMQIRKAYDTRVSQDIALLDALIGELEAKECQSEWELLQ
DIGDILHRAKTVPVPEKWTPQEIKQKIQLLHQKSEFVEKSTKYFSETLRSEMEMFNVPELIGAQHA
VNVILDAETAYPNLIFSDDLKSVRLGNKWERLPDGPQRFDSQIIVLGSPSFLSGRRYWEVEVGDKTA
WILGACKTSISRKGNMTLSPENGYWVIMMKENYQASSVPPTRLLIKEPPKRVGIFVDYRVGSISFY
NVTARSHIYTFASCSFSGPLQPIFSPGTRDGGKNTAPLTICPVGGQGP

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 Pylrin (Marenostrin) 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 (PubMed:10807793, PubMed:11468188, PubMed:16037825, PubMed:16785446, PubMed:17431422, PubMed:17964261, PubMed:18577712, PubMed:19109554, PubMed:19584923, PubMed:26347139, PubMed:27030597, PubMed:28835462). 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 (PubMed:16785446, PubMed:17431422, PubMed:26347139). 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 (PubMed:16785446, PubMed:17431422, PubMed:26347139). 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 (PubMed:16037825, PubMed:27030597, PubMed:28835462). 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 (PubMed:10807793, PubMed:11468188, PubMed:17964261, PubMed:18577712, PubMed:19109554, PubMed:19584923). Recruits PSTPIP1 to inflammasomes, and is required for PSTPIP1 oligomerization (PubMed:10807793, PubMed:11468188, PubMed:17964261, PubMed:18577712, PubMed:19109554, PubMed:19584923).

Subcellular Localization: [Isoform 1]: Cytoplasm, cytoskeleton . Cell projection, ruffle . Cell projection, lamellipodium . Nucleus . Cytoplasm . Cytoplasmic vesicle, autophagosome . Note=Associated with microtubules and with the filamentous actin of perinuclear filaments and peripheral lamellar ruffles (PubMed:11468188). In pre-apoptotic cells, colocalizes with PYCARD/ASC in large specks (inflammasomes) (PubMed:11468188). In migrating monocytes, strongly polarized at the leading edge of the cell where it colocalizes with polymerizing actin and PYCARD/ASC (PubMed:11468188).; [Isoform 2]: 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.