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MEFV Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19672c

Product Information

Application	WB, E
Primary Accession	O15553
Other Accession	NP_000234.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41739
Calculated MW	86444
Antigen Region	418-445

Additional Information

Gene ID	4210
Other Names	Pyrin, Marenostrin, MEFV, MEF
Target/Specificity	This MEFV antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 418-445 amino acids from the Central region of human MEFV.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MEFV Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MEFV {ECO:0000303|PubMed:11115844, ECO:0000312|HGNC:HGNC:6998}
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).
Cellular Location	[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)
Tissue Location	Expressed in peripheral blood leukocytes, particularly in mature granulocytes and to a lesser extent in monocytes but not in lymphocytes. Detected in spleen, lung and muscle, probably as a result of leukocyte infiltration in these tissues. Not expressed in thymus, prostate, testis, ovary, small intestine, colon, heart, brain, placenta, liver, kidney, pancreas. Expression detected in several myeloid leukemic, colon cancer, and prostate cancer cell lines

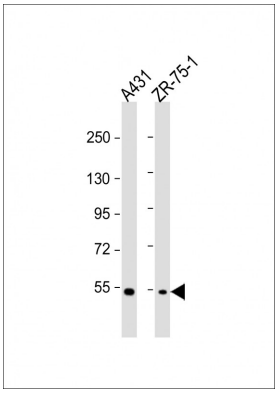
Background

This gene encodes a protein, also known as pyrin or marenostrin, that is an important modulator of innate immunity. Mutations in this gene are associated with Mediterranean fever, a hereditary periodic fever syndrome.

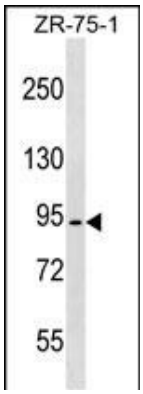
References

Cosan, F., et al. Arthritis Rheum. 62(11):3232-3236(2010)
Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
He, X., et al. Pediatr. Nephrol. 25(10):2077-2082(2010)
Simsek, I., et al. Clin. Rheumatol. (2010) In press :

Images



All lanes : Anti-MEFV Antibody (Center) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: ZR-75-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MEFV Antibody (Center) (Cat. #AP19672c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the MEFV antibody detected the MEFV protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.