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CIAS1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant NLRP3.
Catalog # AT1536a

Product Information

Application	WB
Primary Accession	Q96P20
Other Accession	NM_004895
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3B1
Calculated MW	118173

Additional Information

Gene ID	114548
Other Names	NACHT, LRR and PYD domains-containing protein 3, Angiotensin/vasopressin receptor AII/AVP-like, Caterpiller protein 11, CLR11, Cold autoinflammatory syndrome 1 protein, Cryopyrin, PYRIN-containing APAF1-like protein 1, NLRP3, C1orf7, CIAS1, NALP3, PYPAF1
Target/Specificity	NLRP3 (NP_004886, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CIAS1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

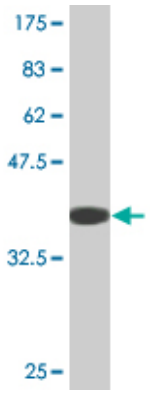
This gene encodes a pyrin-like protein containing a pyrin domain, a nucleotide-binding site (NBS) domain, and a leucine-rich repeat (LRR) motif. This protein interacts with the apoptosis-associated speck-like protein PYCARD/ASC, which contains a caspase recruitment domain, and is a member of the NALP3 inflammasome complex. This complex functions as an upstream activator of NF-kappaB signaling, and it plays a role in the regulation of inflammation, the immune response, and apoptosis. Mutations in this gene are associated with familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS), chronic infantile neurological cutaneous and articular (CINCA) syndrome, and neonatal-onset multisystem inflammatory disease (NOMID). Multiple alternatively spliced transcript variants encoding distinct isoforms have been

identified for this gene. Alternative 5' UTR structures are suggested by available data; however, insufficient evidence is available to determine if all of the represented 5' UTR splice patterns are biologically valid.

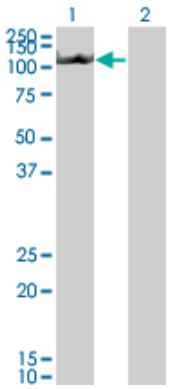
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.A 3'UTR SNP in NLRP3 gene is associated with susceptibility to HIV-1 infection. Pontillo A, et al. J Acquir Immune Defic Syndr, 2010 Jul 1. PMID 20502346.(1,3)-beta-glucans activate both dectin-1 and NLRP3 inflammasome in human macrophages. Kankkunen P, et al. J Immunol, 2010 Jun 1. PMID 20421639.Human NLRP3 inflammasome activation is Nox1-4 independent. van Bruggen R, et al. Blood, 2010 Jul 1. PMID 20407038.The genetics of NOD-like receptors in Crohn's disease. Cummings JR, et al. Tissue Antigens, 2010 Jul. PMID 20403135.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Western Blot analysis of NLRP3 expression in transfected 293T cell line by NLRP3 monoclonal antibody (M01), clone 3B1.

Lane 1: NLRP3 transfected lysate(118.2 KDa).
Lane 2: Non-transfected lysate.