

Recombinant Human NLRP3 Protein, His-tagged

Cat. No. NLRP3-2493H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NLRP3 Protein (Cys770-Trp1036) with a N-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Cys770-Trp1036
Description	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 NLRP3 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. The SARS-CoV 3a protein, a transmembrane pore-forming viroporin, has been shown to activate the NLRP3 inflammasome via the formation of ion channels in macrophages. Mutations in this gene are associated with familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS), chronic infantile neurological cutaneous and articular (CINCA) syndrome, neonatal-onset multisystem inflammatory disease (NOMID), keratoendotheliitis fugax hereditaria, and deafness, autosomal dominant 34, with or without inflammation. 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

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	evidence is available to determine if all of the represented 5' UTR splice patterns are biologically valid.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 33 kDa Accurate Molecular Mass: 33 kDa
Endotoxin	<1.0 EU per 1g (determined by the LAL method).
Purity	> 90%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

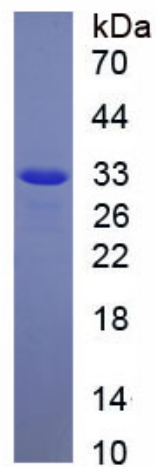
Gene Name NLRP3 NLR family, pyrin domain containing 3 [Homo sapiens (human)]

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Official Symbol	NLRP3
Synonyms	NLRP3; NLR family, pyrin domain containing 3; C1orf7, CIAS1, cold autoinflammatory syndrome 1; NACHT, LRR and PYD domains-containing protein 3; AGTAVPRL; All; AVP; CLR1.1; Cryopyrin; FCAS; FCU; MWS; NALP3; nucleotide binding oligomerization domain; leucine rich repeat and pyrin domain containing 3; PYPAPF1; cryopyrin; caterpillar protein 1.1; PYRIN-containing APAF1-like protein 1; NACHT, LRR and PYD containing protein 3; cold autoinflammatory syndrome 1 protein; NACHT domain-, leucine-rich repeat-, and PYD-containing protein 3; nucleotide-binding oligomerization domain, leucine rich repeat and pyrin domain containing 3; CIAS1; C1orf7; FLJ95925;
Gene ID	114548
mRNA Refseq	NM_001079821
Protein Refseq	NP_001073289
MIM	606416
UniProt ID	Q96P20



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