

Product datasheet for RC226287L4V

OriGene Technologies, Inc.

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NLRP3 (NM_001127462) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: NLRP3 (NM_001127462) Human Tagged ORF Clone Lentiviral Particle

Symbol: NLRP3

Synonyms: AGTAVPRL; All; AVP; C1orf7; CIAS1; CLR1.1; DFNA34; FCAS; FCAS1; FCU; KEFH; MWS; NALP3;

PYPAF1

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_001127462

ORF Size: 2937 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC226287).

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 001127462.2</u>, <u>NP 001120934.1</u>

 RefSeq Size:
 4299 bp

 RefSeq ORF:
 2934 bp

 Locus ID:
 114548

 UniProt ID:
 Q96P20

 Cytogenetics:
 1q44

Protein Families: Druggable Genome





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Protein Pathways: NOD-like receptor signaling pathway

MW: 112.3 kDa

Gene Summary: 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 hereditarian, 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 evidence is available to determine if all of the represented 5' UTR splice patterns are biologically valid.

[provided by RefSeq, Aug 2020]