

Product datasheet for **MR221045L4V**

Nlrp1a (NM_001004142) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Nlrp1a (NM_001004142) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Nlrp1a
Synonyms:	CARD7; DEFCAP; Gm14; Gm15; NAC; Nalp1; Nalp1a; Nlrp1; PP1044
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001004142
ORF Size:	3546 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR221045).
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:	NM_001004142.2 , NP_001004142.2
RefSeq Size:	4806 bp
RefSeq ORF:	3549 bp
Locus ID:	195046
UniProt ID:	Q2LKU9
Cytogenetics:	11 43.21 cM


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Gene Summary:

As a potential sensor component of the NLRP1 inflammasome, plays a crucial role in innate immunity and inflammation. In response to pathogens and other damage-associated signals, initiates the formation of the inflammasome polymeric complex, made of Nlrp1b, CASP1, and possibly PYCARD. Recruitment of proCASP1 to the inflammasome promotes its activation and CASP1-catalyzed IL1B and IL18 maturation and secretion in the extracellular milieu. Activation of NLRP1 inflammasome is also required for HMGB1 secretion. The active cytokines and HMGB1 stimulate inflammatory responses. Inflammasomes can also induce pyroptosis, an inflammatory form of programmed cell death (By similarity) (PubMed:23219391). When activated in the bone marrow, induces the pyroptosis of hematopoietic stem cells and progenitor cells of both myeloid and lymphoid lineages, hence allowing the removal of damaged cells, and the release of IL1B, which induces granulopoiesis (PubMed:23219391). Binds ATP (By similarity).[UniProtKB/Swiss-Prot Function]