

Product datasheet for RC215592

TMS1 (PYCARD) (NM_013258) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TMS1 (PYCARD) (NM_013258) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TMS1
Synonyms: ASC; CARD5; TMS; TMS-1; TMS1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC215592 representing NM_013258
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGCGCGCGCGACGCCATCCTGGATGCGCTGGAGAACCTGACCGCCGAGGAGCTCAAGAAGTTCA
 AGCTGAAGCTGCTGTGCGTGCCGCTGCGCGAGGGCTACGGCGCATCCCAGGGGGCGCGTGTCCAT
 GGACGCTTGGACCTCACCGACAAGCTGGTCAGCTTTTACCTGGAGACCTACGGCGCGAGCTCACCGCT
 AACGTGCTGCGGACATGGCCTGCAGGAGATGGCCGGGAGCTGCAGGGGCCACGCACCAGGGCTCTG
 GAGCCGCGCCAGCTGGGATCCAGGCCCTCCTCAGTCGGCAGCCAAGCCAGGCCTGCACTTTATAGACCA
 GCACCGGGCTGCGCTTATCGCGAGGGTCAAAAGTTGAGTGGCTGCTGGATGCTCTGTACGGGAAGGTC
 CTGACGGATGAGCAGTACCAGGCAGTGCAGGGCCGAGCCACCAACCAAGCAAGATGCGGAAGCTTTCA
 GTTTCACACCAGCCTGGAAGTGGACCTGCAAGGACTTGCTCCTCCAGGCCCTAAGGGAGTCCCAGTCTCA
 CCTGGTGGAGGACCTGGAGCGGAGC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215592 representing NM_013258
 Red=Cloning site Green=Tags(s)

MGRARDAILDALENLTAELKKFKLKLKLSVPLREGYGRIPRGALLSMDALDLTDKLVSFYLETYGAELTA
 NVLRDMGLQEMAGQLQAATHQGSAAAPAGIQAPPQSAAKPGLHFIDQHRAALIARVTNVEWLLDALYKGV
 LTDEQYQAVRAEPTNPSKMRKLSFSTPAWNWTCKDLLLQALRESQSYLVEDLERS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6044_h10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013258

ORF Size: 585 bp

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

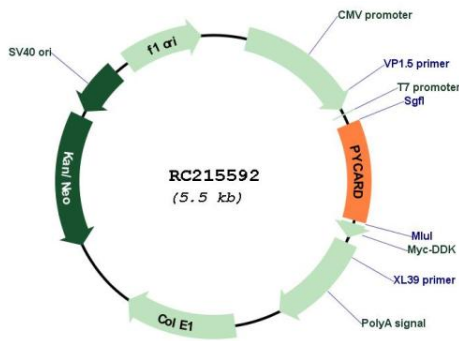
RefSeq: [NM_013258.5](#)

RefSeq Size: 936 bp

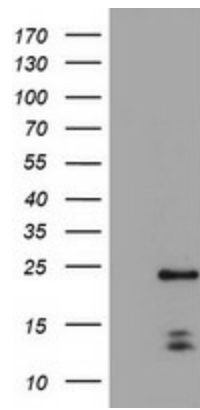
RefSeq ORF:	588 bp
Locus ID:	29108
UniProt ID:	Q9ULZ3
Cytogenetics:	16p11.2
Domains:	PAAD_DAPIN
Protein Families:	Druggable Genome
Protein Pathways:	Cytosolic DNA-sensing pathway, NOD-like receptor signaling pathway
MW:	21.4 kDa
Gene Summary:	

This gene encodes an adaptor protein that is composed of two protein-protein interaction domains: a N-terminal PYRIN-PAAD-DAPIN domain (PYD) and a C-terminal caspase-recruitment domain (CARD). The PYD and CARD domains are members of the six-helix bundle death domain-fold superfamily that mediates assembly of large signaling complexes in the inflammatory and apoptotic signaling pathways via the activation of caspase. In normal cells, this protein is localized to the cytoplasm; however, in cells undergoing apoptosis, it forms ball-like aggregates near the nuclear periphery. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

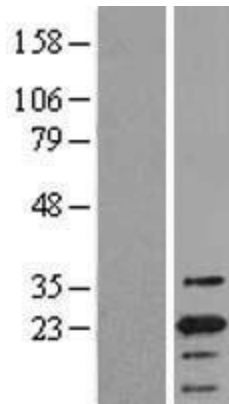
Product images:



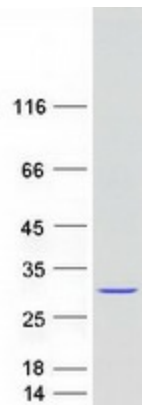
Circular map for RC215592



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PYCARD (Cat# RC215592, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PYCARD(Cat# [TA800080]). Positive lysates [LY402233] (100ug) and [LC402233] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402233]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215592 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PYCARD protein (Cat# [TP315592]). The protein was produced from HEK293T cells transfected with PYCARD cDNA clone (Cat# RC215592) using MegaTran 2.0 (Cat# [TT210002]).