

Product datasheet for **RC202409**

TMS1 (PYCARD) (NM_145183) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TMS1 (PYCARD) (NM_145183) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TMS1
Synonyms: apoptosis-associated speck-like protein containing a CARD; ASC; ASC, TMS1, CARD5, MGC10332; CARD5; caspase recruitment domain protein 5; MGC10332; PYD and CARD domain containing; target of methylation-induced silencing-1; TMS; TMS-1; TMS1

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC202409 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGGCGCGCGCGCAGCCATCCTGGATGCGCTGGAGAACCTGACCGCCGAGGAGCTCAAGAAGTTCA
AGCTGCAGGCGGCCACGCACCAGGGCTCTGGAGCCGCCAGCTGGGATCCAGGCCCTCCTCAGTCGGC
AGCCAAGCCAGGCTGCACTTTATAGACCAGCACCGGGCTGCGCTTATCGCGAGGGTCACAAACGTTGAG
TGGCTGCTGGATGCTCTGTACGGGAAGGTCTGACGGATGAGCAGTACCAGGCAGTGCGGCCGAGCCCA
CCAACCAAGCAAGATGCGGAAGCTCTTCAGTTTCACACCAGCCTGGAAGTGGACCTGCAAGGACTTGCT
CCTCCAGGCCCTAAGGGAGTCCCAGTCTACCTGGTGGAGGACCTGGAGCGGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202409 protein sequence
Red=Cloning site Green=Tags(s)

MGRARDAILDALENLTAEELKFKLQAATHQSGAAPAGIQAPPQSAAKPGLHFIDQHRAALIARVTNVE
WLLDALYGKVL TDEQYQAVRAEPTNPSKMRKLF SFTPAWNWTCKDLLLQALRESQS YLVEDLERS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6391_g11.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145183

ORF Size: 405 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.

RefSeq: [NM_145183.1](#), [NP_660184.1](#)

RefSeq Size: 763 bp

RefSeq ORF: 407 bp

Locus ID: 29108

Cytogenetics: 16p11.2

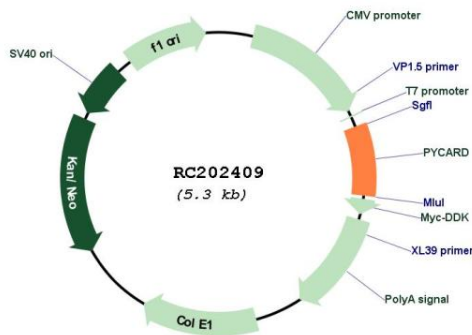
Protein Families: Druggable Genome

Protein Pathways: Cytosolic DNA-sensing pathway, NOD-like receptor signaling pathway

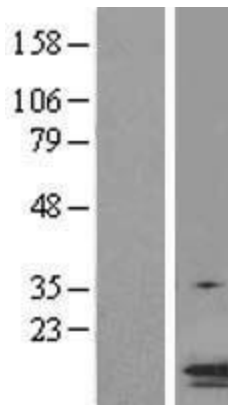
MW: 15 kDa

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]

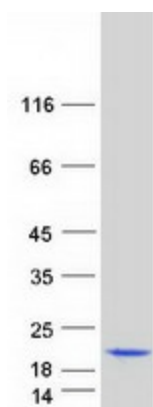
Product images:



Circular map for RC202409



Western blot validation of overexpression lysate (Cat# [LY408042]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202409 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PYCARD protein (Cat# [TP302409]). The protein was produced from HEK293T cells transfected with PYCARD cDNA clone (Cat# RC202409) using MegaTran 2.0 (Cat# [TT210002]).