

## Product datasheet for **RG202409**

### 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:** TurboGFP  
**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-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG202409 representing NM\_145183  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGGGCGCGCGCGCAGCCATCCTGGATGCGCTGGAGAACCTGACCGCCGAGGAGCTCAAGAAGTTCA  
AGCTGCAGGCGGCCACGCACCAGGGCTCTGGAGCCGCGCCAGCTGGATCCAGGCCCTCCTCAGTCGGC  
AGCCAAGCCAGGCTGCACTTTATAGACCAGCACCAGGGCTGCGCTTATCGCGAGGGTCACAAACGTTGAG  
TGGCTGCTGGATGCTCTGTACGGGAAGGTCTGACGGATGAGCAGTACCAGGCAGTGCAGGCCGAGCCCA  
CCAACCAAGCAAGATGCGGAAGCTCTTCAGTTTCACACCAGCCTGGAAGTGGACCTGCAAGGACTTGCT  
CCTCCAGGCCCTAAGGGAGTCCCAGTCTACCTGGTGGAGGACCTGGAGCGGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG202409 representing NM\_145183  
Red=Cloning site Green=Tags(s)  
MGRARDAILDALLENLTAEELKFKLQAATHQGSGAAPAGIQAPPQSAAPGLHFIDQHRAALIARVTNVE  
WLLDALYGVLTDEQYQAVRAEPTNPSKMRKLFSTPAWNWTCKDLLLQALRESQSYLVEDLERS

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**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

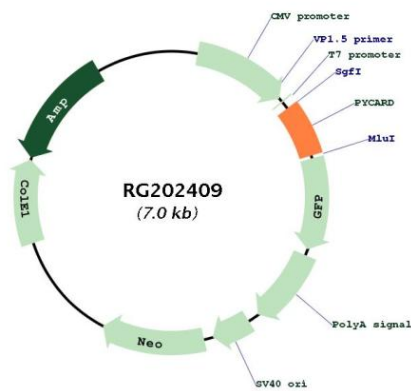
**Cytogenetics:** 16p11.2

**Protein Families:** Druggable Genome

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

**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 RG202409