

Product datasheet for **SC310060**

PML Protein (PML) (NM_033249) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PML Protein (PML) (NM_033249) Human Untagged Clone
Tag:	Tag Free
Symbol:	PML Protein
Synonyms:	MYL; PP8675; RNF71; TRIM19
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene ORF sequence for NM_033249 edited
AGAGCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGCGA
ATTCGGCACGAGGCGAGAATCGAAACTAAGCTGGGGTCCATGGAGCCTGCACCCGCCCGA
TCTCCGAGGCCCCAGCAGGACCCCGCCCGCCAGGAGCCACCATGCCTCCCCCGAG
ACCCCTCTGAAGGCCCGCAGCCAGCCCGCCAGCCAGCCCTACAGAGCGAGCCCCCGT
TCGGAGGAGGAGTCCAGTTTCTGCGCTGCCAGCAATGCCAGGCGGAAGCCAAGTGCCCG
AAGCTGCTGCCTTGCTGCACACGCTGTGCTCAGGATGCCTGGAGGCGTGGGCGATGCAG
TGCCCCATCTGCCAGGCGCCTGGCCCTAGGTGCAGACACCCGCCCTGGATAACGTC
TTTTTCGAGAGTCTGCAGCGGCGCTGTCGGTGTACCGGCAGATTGTGGATGCGCAGGCT
GTGTGCACCCGCTGCAAAGAGTCGGCCGACTTCTGGTGTCTTGTAGTGCAGCAGCTCCTC
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TCCAAGCCGCTGTGCTGCTCGTGCAGCTCCTTGACAGCAGCCACAGTGAGCTCAAGTGC
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CAAGTGCCGTGCGCACCCGATGGCTTCGACGAGTTCAGGTGCGCCTGCAGGACCTCAGC
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GATGACAGCAGCAGTGAGTCCAGTGACCTCCAGCTGGAAGGCCCCAGCACCTCAGGTC
CTGGACGAGAACCTTGCTGACCCCAAGCAGAAGACAGACCTCTGTTTTCTTTGACCTC
AAGATTGACAATGAAACCCAGAAGATTAGCCAGCTGGCTGCGGTGAACCGGAAAGCAAG
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GAGGTGGGGCTGCAGCACTTCTCAGCTTCTGAGCTCCATGCGCCGCCCTATCTTGCC
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AGGCTGTGGGAATTCCAGGAGGCCATCTCGGGCTTCTGGCTGCCTGCCTCTCATCCGG
GAGCGTGTGCCGGGGCCAGCAGCTTCAAACCTCAAGAACCTGGCCAGACCTACCTGGCG
AGAAACATGAGCGAGCGCAGCGCCATGGCTGCCGTGCTGGCCATGCGTGACCTGTGCCG
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CAGTGCTTTGCCTCCCTGCAGCCCTGGTGCAGGACAGTGTGCTGCCCGGGCTGAGGCC
CGCTCCTGGCCCTACACAACGTGAGCTTTCATGGAGCTGCTGAGTGCACACCGCCGTGAC
CGGCAGGGGGCCTGAAGAAGTACAGCCGCTATCTAAGCCTGCAGACCACCAGTTGCC
CCTGCCAGCCTGCTTTCAACCTGCAGGCTCTGGGCACCTACTTTGAAGGCTGTTGGAG
GGTCCGGCGTGGCACGGGCAGAAGGAGTCTCACCCCACTTGTGGCCGTGGCTGGCA
GAGAGGGCCTCCAGCAGAGCTGAGAGGAGGGGTGACCAGCTTGGAGTCTCTGGTGGC
AGAGAGGGATGGGTCCCTGAGCCAGGCCCCACCCATCACAGCATCCAGGTCTGGTA
CCCA
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_033249 unedited AGAAATTTGTAATACGACTCACTATAGGGGCGGCCGGAATCGGCACGAGGCGAGAATCG AAACTAAGCTGGGGTCCATGGAGCCTGCACCCGCCGATCTCCGAGGCCCCAGCAGGACC CCGCCCCGGCCCCAGGAGCCCACCATGCCTCCCCCGAGACCCCTCTGAAGGCCGCCAGC CCAGCCCCAGCCCCAGCCCTACAGAGCGAGCCCCGCTTCGGAGGAGGAGTTCAGTTTC TGCGCTGCCAGCAATGCCAGGCGGAAGCCAAGTGCCCGAAGCTGCTGCCTTGTCTGCACA CGCTGTGCTCAGGATGCCTGGAGGCGTCGGGCATGCAGTGCCCCATCTGCCAGGCGCCCT GGCCCCTAGGTGCAGACACCCGCCCTGGATAACGTCTTTTTCGAGAGTCTGCAGCGGC GCCTGTGGTGTACCGGCAGATTGTGGATGCGCAGGCTGTGTGCACCCGCTGCAAAGAGT CGGCCGACTTCTGGTGTCTTGTAGTGCGAGCAGCTCCTCTGCGCCAAGTGCTTCGAGGCAC ACCAGTGGTTCCTCAAGCAGGAGGCCCGGCCCTAGCAGAGCTGCGCAACCAGTCGGTGC GTGAGTTCCTGGACGGCACCCGCAAGACCAACAACATCTTCTGCTCAACCCCAACCACC GCACCCCTACGCTGACCAGCATCTACTGCCGAGGATGTTCCAAGCCGCTGTGCTGCTCGT GCGCGCTCCTTGACAGCAGCCACAGTGAGCTCAAGTGCGACATCAGCGCAGAGATCCAGC AGCGACAGGAAGAGCTGGACGCCATGACGCAGCGCTGCANGAGCANGATAGTGCCTTTG GCGCGGTNACGCGCAAATGCACGCGNCGTCG
Restriction Sites:	NotI-NotI
ACCN:	NM_033249
Insert Size:	3900 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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:	<ol style="list-style-type: none"> 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:	<u>NM_033249.2</u> , <u>NP_150252.1</u>
RefSeq Size:	2110 bp
RefSeq ORF:	1758 bp
Locus ID:	5371
UniProt ID:	<u>P29590</u>
Cytogenetics:	15q24.1

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Acute myeloid leukemia, Pathways in cancer, Ubiquitin mediated proteolysis

Gene Summary: The protein encoded by this gene is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This phosphoprotein localizes to nuclear bodies where it functions as a transcription factor and tumor suppressor. Its expression is cell-cycle related and it regulates the p53 response to oncogenic signals. The gene is often involved in the translocation with the retinoic acid receptor alpha gene associated with acute promyelocytic leukemia (APL). Extensive alternative splicing of this gene results in several variations of the protein's central and C-terminal regions; all variants encode the same N-terminus. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (10) has multiple differences in the coding region compared to variant 1, one of which results in translational frame-shift. The resulting isoform (10, also known as PML-4A, PML-IVA and TRIM19lambda) has a distinct C-terminus and is shorter than isoform 1.