

Product datasheet for **SC117011**

PD1 (PDCD1) (NM_005018) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PD1 (PDCD1) (NM_005018) Human Untagged Clone
Tag:	Tag Free
Symbol:	PD1
Synonyms:	CD279; hPD-1; hPD-I; hSLE1; PD-1; PD1; SLEB2
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 sequence for NM_005018 edited
GAATTCGGCACGAGGTGGAGAAGGCGGCACTCTGGTGGGGCTGCTCCAGGCATGCAGATC
CCACAGGCGCCCTGGCCAGTCGTCTGGGCGGTGCTACAACCTGGGCTGGCGGCCAGGATGG
TTCTTAGACTCCCCAGACAGGCCCTGGAACCCCCACCTTCTCCCAGCCCTGCTCGTG
GTGACCGAAGGGGACAACGCCACCTTACCTGCAGTTTCTCAACACATCGGAGAGCTTC
GAGGACCGCAGCCAGCCCGGCCAGGACTGCCGTTCCGTGTACACAACCTGCCAACCGGG
CGTGACTTCCACATGAGCGTGGTCAGGGCCCGGCAATGACAGCGGCACCTACCTCTGT
GGGGCCATCTCCCTGGCCCCAAGGCGCAGATCAAAGAGAGCCTGCGGGCAGAGCTCAGG
GTGACAGAGAGAAGGGCAGAAGTGCCACAGCCACCCAGCCCTCACCAGGCCAGCC
GGCCAGTTCAAACCCTGGTGGTGGTGTGCTGGGCGGCCTGCTGGGCAGCCTGGTGTG
CTAGTCTGGTCTGGCCGTCATCTGCTCCCGGGCCGACGAGGGACAATAGGAGCCAGG
CGCACCGGCCAGCCCTGAAGGAGGACCCCTCAGCCGTGCTGTGTTCTGTGGACTAT
GGGAGCTGGATTTCCAGTGGCAGAGAAGACCCCGGAGCCCCCGTGCCTGTGTCCCT
GAGCAGACGGAGTATGCCACATTGTCTTCTAGCGGAATGGGCACCTCATCCCCGCC
CCGAGGGGCTCAGCCAGCGCCCTCGGAGTGCCAGCCACTGAGGCCTGAGGATGGACAC
TGCTCTTGGCCCTCTGACCGGCTTCTTGGCCACCAGTGTCTGCAGACCTCCACCAT
GAGCCCGGGTCAGCGCATTTCCTCAGGAGAAGCAGGCAGGGTGCAGGCCATTGCAGGCCG
TCCAGGGGCTGAGCTGCCTGGGGCGACCCGGGCTCCAGCCTGCACCTGCACCAGGCACA
GCCCCACCACAGGACTCATGTCTCAATGCCACAGTGAGCCAGGCAGCAGGTGTACCCG
TCCCCTACAGGGAGGGCCAGATGCAGTCACTGCTTCCAGTCTGCCAGCAGAGCTGCC
TGCGTCCAGTCCCTGAATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCGGCC
CGGGGCTGAAGGCGCCGTGGCCCTGCCTGACCCCCGGAGCCTCCTGCCTGAATTGGGG
GCTGGTTGGAGATGGCCTTGGAGCAGCCAAGGTGCCCTGGCAGTGGCATCCCGAAACGC
CCTGGACGCAGGGCCCAAGACTGGGCACAGGAGTGGGAGGTACATGGGGCTGGGGACTCC
CCAGGAGTTATCTGCTCCCTGCAGGCCTAGAGAAGTTTCAGGGAAGGTGAGAAGAGCTCC
TGGCTGTGGTGGCAGGGCAGGAAACCCCTCCACCTTTACACATGCCAGGCAGCACCTC
AGGCCCTTGTGGGGCAGGGAAGCTGAGGCAGTAAGCGGGCAGGCAGAGCTGGAGGCCTT
TCAGGCCAGCCAGCACTCTGGCCTCCTGCCGCCGATTCCACCCAGCCCTCACACCA
CTCGGGAGAGGGACATCCTACGGTCCAAGGTGAGGAGGGCAGGGCTGGGGTTGACTCAG
GCCCTCCAGCTGTGGCCACCTGGGTGTTGGGAGGGCAGAAGTGCAGGCACCTAGGGCC
CCCCATGTGCCACCCCTGGGAGCTCCTTGAACCCATTCTGAAATTTAAAGGGG
TTGGCCGGGCTCCACCAGGGCCTGGGTGGGAAGGTACAGGCCTTCCCCGGGGCCTAGT
ACCCCCGCGTGGCCTATCCACTCCTCACATCCACACTGCACCCCACTCCTGGGGCA
GGGCCACCAGCATCCAGGCGGCCAGGCACCTGAGTGGCTGGGACAAGGGATCCCCCT
TCCCTGTGGTTCTATTATATTATAATTATAATTAATATGAGAGCATGCCAAAAAAAAA
AAAAAAAAACTCGAC
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005018 unedited
 GCATTTTGTAAATACGAACACTACTATAGGGCGGCCGCAATTCGCACGAGGTGGAGAAGGC
 GGCACTCTGGTGGGGCTGCTCCAGGCATGCAGATCCCACAGGCGCCCTGGCCAGTCGTCT
 GGGCGGTGCTACAACCTGGGCTGGCGCCAGGATGGTTCTTAGACTCCCCAGACAGGCCCT
 GGAACCCCCACCTTCTCCCCAGCCCTGCTCGTGGTGACCGAAGGGGACAACGCCACCT
 TCACCTGCAGCTTCTCCAACACATCGGAGAGCTTCGTGCTAAACTGGTACCGCATGAGCC
 CCAGCAACCAGACGGACAAGCTGGCCGCTTCCCGAGGACCCAGCCAGCCCGGCCAGG
 ACTGCCGCTTCCGTGTCACACAACCTGCCAACGGGCGTGACTTCCACATGAGCGTGGTCA
 GGGCCCGCGCAATGACAGCGGCACCTACTCTGTGGGGCCATCTCCCTGGCCCCAAGG
 CGCAGATCAAAGAGAGCCTGCGGGCAGAGCTCAGGGTGACAGAGAGAAGGGCAGAAGTGC
 CCACAGCCACCCAGCCCTCACCCAGGCCAGCCGGCCAGTTCCAAACCCTGGTGGTTG
 GTGTCGTGGGCGGCTGCTGGGCAGCCTGGTGTGCTAGTCTGGGTCCTGGCCGTCATCT
 GCTCCCGGGCCGACGAGGGACAATAGGAGCCAGGCGCACCGGCCAGCNCCTGAAGAGG
 ACCCTCAGCCGTGCCTGTGTTCTGTGGACTATGGGGAGCTGGATTTCCAGTGGCGAG
 AGAAGACCCCGGACCCCGTGCCTGTGTCCCTGAGCAGACGGAGTATGCCACCATTGT
 CTTTCTAGCGGAATGGGCACCTCATNCNCCGCCCGCAGGGGCTAGCCGACGGCCCTCG
 GAGTGCCAGCCCTGAGGCTGAGATGGACCTGCTCTTGCCTCTGACGGCTNCTGGCC
 CAGGT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005018 unedited
 CGCGGCCGAATTTAGNATCGAGTTTTTTTTTTTTTTTTTTTTGGCATGCTCTCATATTTAA
 TTATAATTATAATATAATAGAACCACAGGAAGGGGATCCCTTGTCCCAGCCACTCAGG
 TGCTGTGGCCGCTGGATGCTGGTGGCCCTGCCCCAGGAGTGGGGTGCAGTGTGTGG
 ATGTGAGGAGTGGATAGGCCACGGCGGGGTAAGGCCCGGGGAACGCTGTACCTT
 CCCACCCAGGCCCTGGTGGGAGCCCGGCCAACCCCTTTAAATAATTTAGGAATGGGTT
 CAAGGAGAGTCCCAGGGTGGGCACATGGGGGGCCCTAGGTGCCTGCACTTCTGCCCTCC
 CAACACCCAGGTGGCCACAGCTGGGAGGGGCTGAGTCAACCCAGCCCTGCCCTCTGA
 CCTTGGGACCGTAGGATGTCCTCTCCCGAGTGGTGTGAGGGGCTGGGGTGAATGCGGC
 GGCAGGAGGCCAGAGTGTGGCTGGGCTGAAAGGCCCTCAGCTCTGCCTGCCCGCTTAC
 TGCTCAGCTTCTGCCCCACAAGGGCCTGAGGTGCTGCCTGGGCATGTGTAAGGTG
 GAGGGGTTTCTGCCCTGCCACCACAGCAGGAGCTTCTGACCTTTCTGAAACTTC
 TTAGGCCTGCAGGGAGCAGATAACTTCTGGGAGTCCCCAGCCCATTTGCTTCCAAT
 TCTGTGCCAGTCTTGGGCCCTGCGCCAGGGCTTTTGGGATGCCCTGCCCGGGGCC
 CTTTGTGGTCCAAGCCATTTCCAACCAACCCCAAGTTTCCAGGGAAGTTCCGGGCGTAA
 GGAAGGGCCCGCCTTTAACCCCGGCCCATGCACTACTACATCATATCATCAGTTCCG
 AGTATATGGAGCTGGCCAGCACTTTTTGTCTGCAGGACTCGAAACAT

Restriction Sites:

NotI-NotI

ACCN:

NM_005018

Insert Size:

867 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).

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:	NM_005018.1 , NP_005009.1
RefSeq Size:	2106 bp
RefSeq ORF:	867 bp
Locus ID:	5133
UniProt ID:	Q15116
Cytogenetics:	2q37.3
Domains:	ig, IGv, IG
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cell adhesion molecules (CAMs), T cell receptor signaling pathway
Gene Summary:	Programmed cell death protein 1 (PDCD1) is an immune-inhibitory receptor expressed in activated T cells; it is involved in the regulation of T-cell functions, including those of effector CD8+ T cells. In addition, this protein can also promote the differentiation of CD4+ T cells into T regulatory cells. PDCD1 is expressed in many types of tumors including melanomas, and has demonstrated to play a role in anti-tumor immunity. Moreover, this protein has been shown to be involved in safeguarding against autoimmunity, however, it can also contribute to the inhibition of effective anti-tumor and anti-microbial immunity. [provided by RefSeq, Aug 2020]