

Product datasheet for **RG210364**

PD1 (PDCD1) (NM_005018) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PD1 (PDCD1) (NM_005018) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PD1
Synonyms: CD279; hPD-1; hPD-I; hSLE1; PD-1; PD1; SLEB2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG210364 representing NM_005018
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGCAGATCCCACAGGCGCCCTGGCCAGTCGTCTGGGCGGTGCTACAACCTGGGCTGGCGGCCAGGATGGT
 TCTTAGACTCCCCAGACAGGCCCTGGAACCCCCACCTTCTCCCAGCCCTGCTCGTGGTGACCGAAGG
 GGACAACGCCACCTTCACCTGCAGCTTCTCCAACACATCGGAGAGCTTCGTGCTAACTGGTACCGCATG
 AGCCCCAGCAACCAGACGACAAGCTGGCCGCTTCCCCGAGGACCGCAGCCAGCCCGGCCAGGACTGCC
 GCTTCCGTGTACACAACCTGCCAACGGGCGTGACTTCCACATGAGCGTGGTCAGGGCCCGCGCAATGA
 CAGCGGCACCTACCTCTGTGGGGCCATCTCCCTGGCCCCAAGGCGCAGATCAAAGAGAGCCTGCGGGCA
 GAGCTCAGGGTGACAGAGAGAAGGGCAGAAGTGCCACAGCCACCCAGCCCTCACCCAGGCCAGCCG
 GCCAGTTCCAAACCTGGTGGTGGTGTCTGTGGGCGCCCTGCTGGGCAGCCTGGTGTCTAGTCTGGGT
 CCTGGCCGTACTGTCTCCCGGGCCGCACGAGGGACAATAGGAGCCAGGCGCACCAGCCAGCCCTGAAG
 GAGGACCCTCAGCCGTGCCTGTGTTCTCTGTGGACTATGGGAGCTGGATTTCCAGTGGCGAGAGAAGA
 CCCCAGGCCCCCGTGCCTGTGTCCCTGAGCAGACGGAGTATGCCACCATTGTCTTCTAGCGGAAT
 GGGCACCTATCCCCGCCCCGAGGGCTCAGCCGACGGCCCTCGGAGTGCCAGCCACTGAGGCCTGAG
 GATGGACTGCTCTTGGCCCCCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG210364 representing NM_005018
 Red=Cloning site Green=Tags(s)

MQIPQAPWPVVWAVLQLGWRPGWFLDSPDRPWNPTTFSPALLVVTEGDNATFTCSFSNTSESVLNNWYRM
 SPSNQTDKLAAPFEDRSQPGQDCRFRTVQLPNGRDFHMSVVRARRNDSGTYLCGAISLAPKAQIKESLRA
 ELRVTERRAEVPTAHPSPSPRPAGQFQTLVVGVVGGLLGSLVLLVWVLAVICRAARGTIGARRTGQPLK
 EDPSAVPVFSDVYGELDFQWREKTPPEPPVPCVPEQTEYATIVFPSGMGTSSPARRGSADGPRSAQPLRPE
 DGHCSWPL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005018

ORF Size: 864 bp

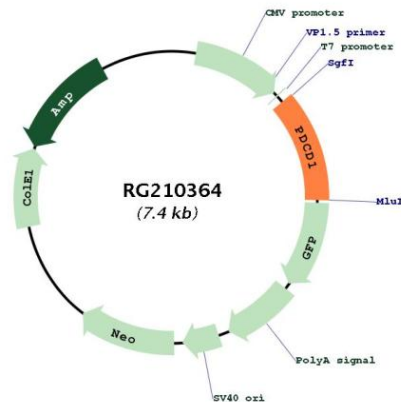
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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]

Product images:



Circular map for RG210364