

Product datasheet for **SC115168**

PD-L1 (CD274) (NM_014143) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PD-L1 (CD274) (NM_014143) Human Untagged Clone
Tag:	Tag Free
Symbol:	CD274
Synonyms:	B7-H; B7H1; hPD-L1; PD-L1; PDCD1L1; PDCD1LG1; PDL1
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>OriGene ORF within SC115168 sequence for NM_014143 edited (data generated by NextGen Sequencing)

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ATGAGGATATTTGCTGTCTTTATATTCATGACCTACTGGCATTGCTGAACGCATTTACT
GTCACGGTTCCCAAGGACCTATATGTGGTAGAGTATGGTAGCAATATGACAATTGAATGC
AAATTCAGTAGAAAAACAATTAGACCTGGCTGCACTAATTGTCTATTGGGAAATGGAG
GATAAGAACATTATTCAATTTGTGCATGGAGAGGAAGACCTGAAGGTTCCAGCATAGTAGC
TACAGACAGAGGGCCCGCTGTTGAAGGACCAGCTCTCCCTGGGAAATGCTGCAC TTCAG
ATCACAGATGTGAAATTGCAGGATGCAGGGGTGTACCGCTGCATGATCAGCTATGGTGGT
GCCGACTACAAGCGAATTACTGTGAAAGTCAATGCCCCATACAACAAAATCAACCAAAGA
ATTTTGGTTGTGGATCCAGTCACCTCTGAACATGAACTGACATGTCAGGCTGAGGGCTAC
CCCAAGGCCGAAGTCATCTGGACAAGCAGTGACCATCAAGTCTGAGTGGTAAGACCACC
ACCACCAATTCCAAGAGAGAGGAGAAGCTTTTCAATGTGACCAGCACACTGAGAAATCAAC
ACAACAATAATGAGATTTTCTACTGCACTTTTAGGAGATTAGATCCTGAGGAAAACCAT
ACAGCTGAATTGGTCATCCCAGAACTACCTCTGGCACATCCTCCAATGAAAGGACTCAC
TTGGTAATTCTGGGAGCCATCTTATTATGCCTTGGTGTAGCACTGACATTCATCTCCGT
TTAAGAAAAGGGAGAATGATGGATGTGAAAAAATGTGGCATCCAAGATACAAACTCAAAG
AAGCAAAGTGATACACATTTGGAGGAGACGTAA
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Clone variation with respect to NM_014143.3



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5' Read Nucleotide Sequence: >OriGene 5' read for NM_014143 unedited
 CGGGCCCNNNCCCAACNCCCGGTTCAAATTTGTATACGACTCACTATAGGCGGC
 CGCGAATTCGCACGAGGCACCAGCCGCGTTCTGTCCGCTGCAGGGCATTCCAGAAAGA
 TGAGGATATTTGCTGTCTTTATATTCATGACCTACTGGCATTGCTGAACGCATTTACTG
 TCACGGTCCCAAGGACCTATATGTGGTAGAGTATGGTAGCAATATGACAATTGAATGCA
 AATTCAGTAGAAAAACAATTAGACCTGGCTGCACTAATTGTCTATTGGGAAATGGAGG
 ATAAGAACATTATCAATTTGTGCATGGAGAGGAAGACCTGAAGGTTTCAGCATAGTAGCT
 ACAGACAGAGGGCCCGCTGTTGAAGGACCAGCTCTCCCTGNAAATGCTGCACTTCAGA
 TCACAGATGTGAAATTGCAGGATGCAGGGTGTACCGCTGCATGATCAGCTATGGTGGTG
 CCGACTACAAGCGAATTACTGTGAAAGTCAATGCCCATACAACAAAATCAACCAAAGAA
 TTTTGGTTGTGGATCCAGTCACCTCTGAACATGAACTGACATGTCANGCTGANGGCTACC
 CCAAGCCGAAGTCATCTGGACAAGCAGTGACCATCAAGTCCTGAGTGGTAAAGACCACCAC
 CACCAATTCGAAGAGAGAGGAGAAGCTTTTCATGTGACCACACTGAGAAATCACACAN
 NCACTATGAGATTTTCTACTGCACTTTTANGAGAATAGATCCCTGAGAAAACATACAGCT
 GAATTGGTCATCCAGAACTACCTCTGGCACATTTTCAATGAAAGGACTCACTTGGTAA
 TNCTGGGAGCCATCCTATTATGCCCTTGGTGTAACTGACATTCATTTTTNCGTTTAAAG
 AAAGNAGAATGATGNATGTGAAAAATGTGCATNCCAGATACAANAATCAAGAAGCAAG
 TGATACACATTGGNAGGANACAGTATCCAGCATTGGAAGTTCTGATCTTCAAGCGGGATN
 CTAACCTGGG

3' Read Nucleotide Sequence: >OriGene 3' genomic read for NM_014143 unedited
 TCGACCATGGAATGGCAACTTCCAGNCCAGNAAAGCACTGGGGNAGGGTCACAGGGATG
 CCACCCGGTTCTGTTCCAGGAAAAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTT
 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTACCAAGTAACAAAATAAATAAAAAATATT
 TTATTAATTAATGCAGGTACAAAAAGTGACAATCAAATGCAAAATTAGGTATCATCTCT
 GCCTATGCCATTTACGATGAAACATGAGACAAAAGGGATAAAGTGCCTTACAAATCCAAC
 ACCACAGGGAGGAGTTAGGACTTAGGAATAGACTGAGTAGACTATGTGCCTTGCTCAGCC
 ACAATCTTGCTGTAATTCACACAAAAGAACACTGTACACCAATTAAGTACAAATGCA
 CATGTACAAACAGATAACACAAGGAGCTCTGTTGGAGACTGTTTCTTCAGCCTTGACA
 TGTGGCAAAGCCAAGGTACTCCTTGTCATTGACACCAGAATATGGCCAAGAGGGAAAGGA
 AACTCTGGGATCTCCAGGGCATCTGAATCTCGAAACCTCCAGGAAGCCTCTTAAGAGGG
 CTGTGTAGTGATGACAGCTGGTGGCATTCAAGGGTTCAAGCACACGAATGAGGCTTTTC
 TGGCACAGGGTAGCTAGCAGTCAAGGTACTGCCGGAATTTCCAGAAAAGAAAATGTGAT
 TTTGCAAGTACAGCATCAAAGTGAAGTTTATACTTGACAGAAAGCAGAAAACAAAAGTTC
 CAGACATGATTCTGTACATACAGAGTTAATAATAAGATTGCTTTTTAGGACTAGATTGACT
 CAGTGACCCTGGAGAGCCCATGGGTCTCCTTTTGGCAACATAACAAATCCAACCTCTGT
 CCTAGACAA

Restriction Sites: NotI-NotI
ACCN: NM_014143
Insert Size: 4000 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_014143.2](#), [NP_054862.1](#)

RefSeq Size: 1553 bp

RefSeq ORF: 873 bp

Locus ID: 29126

UniProt ID: [Q9NZQ7](#)

Cytogenetics: 9p24.1

Domains: ig, IG

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

Gene Summary:

This gene encodes an immune inhibitory receptor ligand that is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The encoded protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.