

## Product datasheet for MR203953

### PD-L1 (Cd274) (NM\_021893) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PD-L1 (Cd274) (NM_021893) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cd274
Synonyms:	A530045L16Rik; B7h1; PD-; Pdcd1l; Pdcd1l1; Pdcd1lg1; Pdl1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203953 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGATATTTGCTGGCATTATATTCACAGCCTGCTGTCACTTGTACGGGCGTTTACTATCACGGCTC  
CAAAGGACTTGTACGTGGTGGAGTATGGCAGCAACGTACGATGGAGTGCAGATCCCTGTAGAACGGGA  
GCTGGACCTGCTTGCCTTAGTGGTGTACTGGGAAAAGGAAGATGAGCAAGTGATTCAGTTTGTGGCAGGA  
GAGGAGGACCTTAAGCCTCAGCACAGCAACTTCAGGGGGAGAGCCTCGCTGCCAAAGGACCAGCTTTTGA  
AGGGAAATGCTGCCCTTCAGATCACAGACGTCAAGCTGCAGGACGCAGGGCTTACTGCTGCATAATCAG  
CTACGGTGGTGGCAGTACAAGCGAATCAGCTGAAAGTCAATGCCCATACCGCAAATCAACCAGAGA  
ATTTCCGTGGATCCAGCCACTTCTGAGCATGAACTAATATGTCAGGCCGAGGGTTATCCAGAAGCTGAGG  
TAATCTGGACAAACAGTGACCACCAACCCGTGAGTGGGAAGAGAAGTGTACCACCTCCCGGACAGAGGG  
GATGCTTCTCAATGTGACCAGCAGTCTGAGGGTCAACGCCACAGCGAATGATGTTTTCTACTGTACGTTT  
TGGAGATCACAGCCAGGGCAAACACACAGCGGAGCTGATCATCCAGAAGTGCCTGCAACACATCCTC  
CACAGAACAGGACTCACTGGGTGCTTCTGGGATCCATCCTGTTGTTTCTCATTGTAGTGTCCACGGTCTC  
CCTCTTCTTGAGAAAACAAGTGAGAACTAGATGTGGAGAAATGTGGCGTTGAAGATACAAGCTCAAAA  
AACCGAAATGATACACAATTCGAGGAGACG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR203953 protein sequence  
 Red=Cloning site Green=Tags(s)

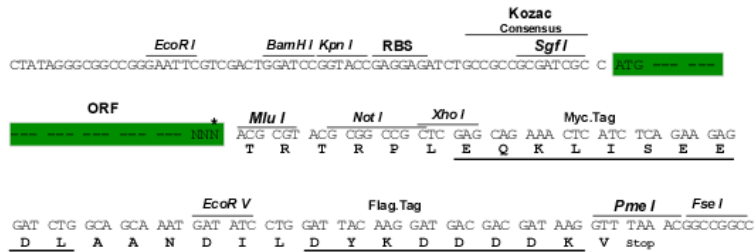
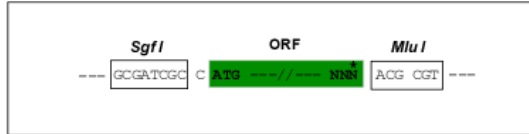
MRIFAGIIFTACCHLLRAFTITAPKDLVYVEYGSNVTMECRFPVERELDLLALVYWEKEDEQVIQFVAG  
 EEDLKPQHSNFRGRASLPKDQLLKGNALQITDVKLQDAGVYCCII SYGGADYKRITLKVNPYRKINQR  
 ISVDPATSEHELICQAEGYPEAEVIWNSDHQPVSGKRSVTTSRTEGMLLNVTSSLRVNATANDVFYCTF  
 WRSQPGQNHTAELIPELPPATHPPQNRTHWVLLGSILLFLIVVSTVLLFLRKQVRMLDVEKCGVEDTSSK  
 NRNDTQFEET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

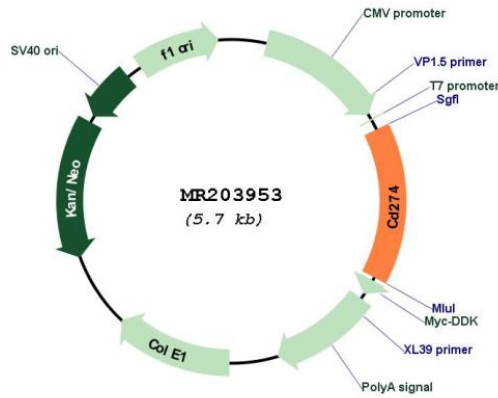
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_021893

ORF Size: 873 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](mailto: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](#)

**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\\_021893.3](#), [NP\\_068693.1](#)

**RefSeq Size:** 3653 bp

**RefSeq ORF:** 873 bp

**Locus ID:** 60533

**UniProt ID:** [Q9EP73](#)

**Cytogenetics:** 19 C1

**MW:** 32.8 kDa

**Gene Summary:**

The protein encoded by this gene is 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. Mice deficient for this gene display a variety of phenotypes including decreased allogeneic fetal survival rates and severe experimental autoimmune encephalomyelitis. [provided by RefSeq, Sep 2015]