

## Recombinant Human PDCD1 Protein (G22-V170), C-6×His tagged

**Cat. No.** PDCD1-75H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant human PD-1, extracellular domain is produced in E. coli. The final protein sequence contains G22-V170 of human PD1 fused to a polyhistidine tag on the carboxyl terminus. This product is sterile and does not contain any components of animal origin.                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ProteinLength</b>    | G22-V170                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>      | 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. |
| <b>AA Sequence</b>      | MPGWFLDSPDRPWNPPTFSPALLVVTEGDNATFTCSFSNTSESVLNWYRMSPSN<br>QTDKLAAFPEDRSQPGQDCRFRVTQLPNGRDFHMSVVRARRNDSGYLCGAISLA<br>PKAQIKESLRAELRVTERRAEVPTAHPSPSPRPAGQFQTLVGSHHHHHH                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                             |                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------|
| <b>Purity</b>               | > 95% by SDS-PAGE                                                                                    |
| <b>Applications</b>         | Research in immunotherapy                                                                            |
| <b>Quality Control Test</b> | Verified by disulfide mapping and Mass Spectrometry analysis.                                        |
| <b>Notes</b>                | For research use only                                                                                |
| <b>Storage</b>              | Avoid repeated freeze-thaw cycles. 12 months at -20 to -80 centigrade. 1 month at 2 to 8 centigrade. |
| <b>Concentration</b>        | 0.4 mg/mL                                                                                            |
| <b>Storage Buffer</b>       | Sterile filtered through a 0.2 micron filter in 50% glycerol, 10 mM MES buffer at pH 6.5             |

## GENE INFORMATION

|                        |                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | PDCD1 programmed cell death 1 [ Homo sapiens (human) ]                                                               |
| <b>Official Symbol</b> | PDCD1                                                                                                                |
| <b>Synonyms</b>        | PDCD1; programmed cell death 1; programmed cell death protein 1; CD279; PD1; protein PD-1; PD-1; SLEB2; hPD-1; hPD-I |
| <b>Gene ID</b>         | 5133                                                                                                                 |
| <b>mRNA Refseq</b>     | NM_005018                                                                                                            |
| <b>Protein Refseq</b>  | NP_005009                                                                                                            |

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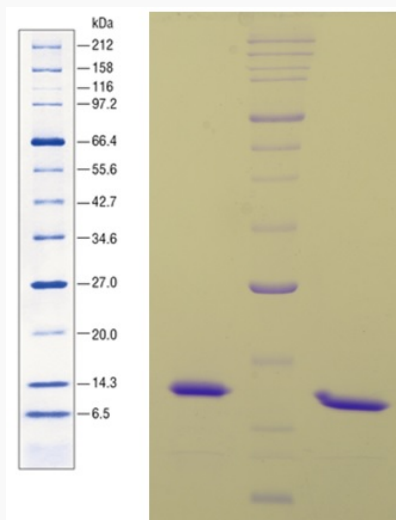
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MIM 600244

UniProt ID Q15116

SDS-PAGE



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