

#64988 Store at -20°C

## PD-L1 (D5V3B) Rabbit mAb



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<b>Applications:</b> IHC-Bond, IHC-P	<b>Reactivity:</b> M	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q9EP73	<b>Entrez-Gene Id:</b> 60533
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### Product Usage Information

#### Application

IHC Leica Bond  
Immunohistochemistry (Paraffin)

#### Dilution

1:100  
1:200

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

For a carrier free (BSA and azide free) version of this product see product #85095.

### Specificity / Sensitivity

PD-L1 (D5V3B) Rabbit mAb recognizes endogenous levels of total mouse PD-L1 protein. Non-specific staining of keratinized epithelium has been observed.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly216 of mouse PD-L1 protein.

### Background

Programmed cell death 1 ligand 1 (PD-L1, B7-H1, CD274) is a member of the B7 family of cell surface ligands that regulate T cell activation and immune responses. The PD-L1 ligand binds the PD-1 transmembrane receptor and inhibits T cell activation. PD-L1 was discovered following a search for novel B7 protein homologs and was later shown to be expressed by antigen presenting cells, activated T cells, and tissues including placenta, heart, and lung (1-3). Similar in structure to related B7 family members, PD-L1 protein contains extracellular IgV and IgC domains and a short, cytoplasmic region. Research studies demonstrate that PD-L1 is expressed in several tumor types, including melanoma, ovary, colon, lung, breast, and renal cell carcinomas (4-6). Expression of PD-L1 in cancer is associated with tumor-infiltrating lymphocytes, which mediate PD-L1 expression through the release of interferon gamma (7). Additional research links PD-L1 expression to cancers associated with viral infections (8,9).

### Background References

1. Dong, H. et al. (1999) *Nat Med* 5, 1365-9.
2. Freeman, G.J. et al. (2000) *J Exp Med* 192, 1027-34.
3. Liang, S.C. et al. (2003) *Eur J Immunol* 33, 2706-16.
4. Dong, H. et al. (2002) *Nat Med* 8, 793-800.
5. Thompson, R.H. et al. (2006) *Cancer Res* 66, 3381-5.
6. Pardoll, D.M. (2012) *Nat Rev Cancer* 12, 252-64.
7. Taube, J.M. et al. (2012) *Sci Transl Med* 4, 127ra37.
8. Lyford-Pike, S. et al. (2013) *Cancer Res* 73, 1733-41.
9. Chen, B.J. et al. (2013) *Clin Cancer Res* 19, 3462-73.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Applications Key

**IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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