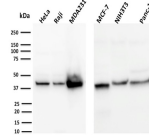


PD-L1 / PDCD1LG1 / CD274 / B7-H1 Monoclonal Mouse Antibody (PDL1/2744)



Product Description

Engagement of CD28 by B7-1 (CD80) or B7-2 (CD86) in the presence of antigen promotes T-cell proliferation, cytokine production, differentiation of effector T-cells and the induction of BCLX, a promoter of T-cell survival. Engagement of CTLA4 by B7-1 or B7-2, on the other hand, may inhibit proliferation and interleukin-2 (IL-2) production. PD-L1 is 290-amino acid type I transmembrane protein, which is 20% and 15% identical to B7-1 and B7-2, respectively, has immunoglobulin V-like and C-like domains and a 30-amino acid cytoplasmic tail. PD-L1 does not bind CD28, cytotoxic T-lymphocyte A4 or ICOS (inducible co-stimulator). IL-2, although produced in small amounts, is required for the effect of PD-L1 co-stimulation. PD-L2 protein contains a signal sequence, IgV- and IgC-like domains, a transmembrane region and a cytoplasmic region. The constitutive expression of PD-L1 and PD-L2 on parenchymal cells of heart, lung and kidney suggests that the PD-1-PD-L system could provide unique negative signaling to help prevent autoimmune diseases.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

Antibody number	#2744
Antibody reactivity (target)	B7-H1, CD274, PD-L1, PDCD1LG1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	PDL1/2744
Isotype	IgG1, kappa
Molecular weight	37-50 kDa
Synonyms	B7 homolog 1; B7-H1; CD274; PD-L1; PDCD1 ligand 1; PDCD1L1; PDCD1LG1; Programmed cell death 1 ligand 1
Human gene symbol	CD274
Entrez gene ID	29126
SwissProt	Q9NZQ7
Unigene	521989
Immunogen	Recombinant fragment of human CD274 protein (around aa39-191) (exact sequence is proprietary)
Verified antibody applications	WB (verified)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human, Mouse
Antibody application notes	ELISA: For coating, order antibody without BSA; Western blot 1-2 ug/mL; Optimal dilution for a specific application should be determined. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody
Positive control	Jurkat, HEK293 or HepG2 cells. Lung SqCC, Cervical or Breast Carcinoma.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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