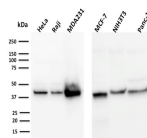


PD-L1 / PDCD1LG1 / CD274 / B7-H1 Monoclonal Mouse Antibody (PDL1/2744)



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.

Catalog number key for antibody number 2744, Anti-B7-H1|CD274|PD-L1|PDCD1LG1 (PDL1/2744)

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 |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. |

| 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 |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 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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