



Anti- human PD-L1 Mouse Monoclonal Primary Antibody

Clone: UMAB229

IVD

REF CE00085

CATALOG NUMBER

C0085MA01-MA 0.1 mL
C0085MA05-MA 0.5 mL
C0085MA10-MA 1.0 mL

ENGLISH

Intended use

Anti- human PD-L1 (Clone: UMAB229) Mouse Monoclonal Primary Antibody is intended for detection of PD-L1 protein expression in frozen or formalin fixed human tissues and cells. The clinical interpretation of any positive staining or its absence should be complemented by morphological and histological studies with proper controls. Evaluations should be made within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist. The antibody is intended for *in vitro* diagnostic (IVD) use.

Background

This gene encodes 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. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Alternative names: CD274; B7-H; B7H1; PD-L1; PDCD1L1; PDCD1LG1; PDL1

Reagent provided

Anti-human PD-L1 Mouse Monoclonal Primary Antibody (Clone: UMAB229) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1,k. The protein concentration is approximately 1.0 +/- 0.05 mg/mL.

For immunohistochemistry, the primary antibody may be used at a working dilution of 1:50 – 1:100 for formalin-fixed, paraffin-embedded human tissue. It can be dependent upon the detection system used. These are guidelines only, and optimal dilutions should be determined by the individual laboratory.

Immunogen

Human recombinant protein fragment corresponding to amino acids 19-290 of human CD274 (NP_054862) produced in E.coli.

Specificity

The specificity of the anti- human PD-L1 Mouse Monoclonal Primary Antibody was established on known positive human lung and placenta. The anti-human PD-L1 presented no staining on human brain and positive staining on three human lung cancer and three placenta using immunohistochemical (IHC) test methods.

Materials Required but Not Supplied

Antibody diluent, HIER solution, Antibody detection kits, Chromogen, Staining reagents, negative and positive tissue control slides are not included.

Precautions

1. For use by trained professionals only.
2. This product contains sodium azide (NaN_3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN_3 may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
3. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
4. Unused reagents should be disposed of according to local, State, and Federal regulations.

Storage

Store at 2-8°C. Do not use the product past the expiration date indicated on the label. If reagents are stored under any other conditions, the end user must verify the acceptability of those conditions. There are no obvious signs to indicate instability of this product therefore, positive and negative controls should be run simultaneously with patient specimens.

*

Specimen Preparation

Paraffin Sections

Anti- human PD-L1 Mouse Monoclonal Primary Antibody can be used on formalin-fixed, paraffin-embedded tissue sections at a working dilution of 1:50 to 1:100. The anti- human PD-L1 Mouse Monoclonal Primary Antibody (Clone: UMAB229) working dilution requires heat induced epitope retrieval (HIER) pretreatment with TEE buffer pH 9.0 for 3 minutes using pressure chamber at 110°C for staining. After pretreatment the primary antibody was incubated for 60 minutes at room temperature in a humid chamber, optimal staining of anti-PD-L1 antibody at a dilution of 1:100 on human lung and placenta. The dilutions are estimates; the actual staining results may vary due to reagents and detection protocols used. Validation of antibody performance and final protocol are the responsibility of the end user.

Staining procedure

Manual Staining Procedure

1. Deparaffinize slides.
2. Rinse with distilled water; wash with PBS-T 3 times, 2 minutes each.
3. Apply serum blocking solution. [Optional]
4. Apply primary antibody and incubate for 60 minutes at room temperature. After incubation wash with PBS-T 3 times, 2 minutes each.
5. Apply secondary antibody and incubate according to the data sheet of the detection system. Wash with PBS-T 3 times, 2 minutes each.
6. Apply enzyme conjugate and incubate according to data sheet of detection system. Wash with PBS-T 3 times, 2 minutes each.
7. Apply chromogen and incubate 5-10 minutes and rinse with distilled water.

Staining interpretation

Anti- human PD-L1 Mouse Monoclonal Primary Antibody is primarily membranous with some cytoplasmic staining.

Performance Characteristics

Predictive Negative Staining in Human Tissue

Human brain was shown to be negative for this antibody.

Predictive Positive Staining in Human Tissue

Anti- human PD-L1 Mouse Monoclonal (Clone: UMAB229) produced primarily membranous with some cytoplasmic staining when screened on three human lung cancer and three placenta.



Contact Information



SDIX LLC
111 Pencader Drive
Newark, Delaware 19702
USA
+1 302 456 6789
+1 800 544 8881(USA)
www.SDIX.com

Product Complaint and/or Technical Support

techsupport@origene.com
+1 301 340 3188 (prompt 2)

Authorized Representative

Colin LeGood
Barnes Wallis House, 25 Barnes Wallis Road
Segensworth East, Hampshire PO15 5TT UK
Tel +44 (0) 1489 898640