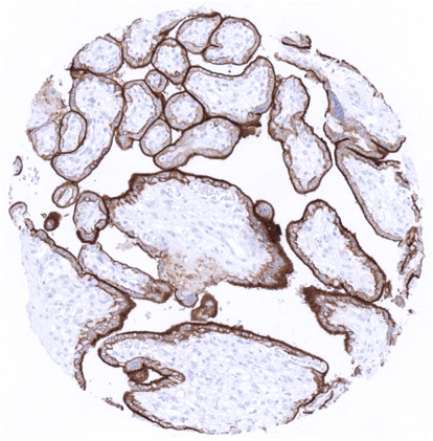
MS Validated Antibodies GmbH
Bergstedter Chaussee 62a
22395 Hamburg, Germany
Tel: +49 (0) 40 89 72 55 81
E-Mail:info@ms-validatedantibodies.com
Website: ms-validatedantibodies.com

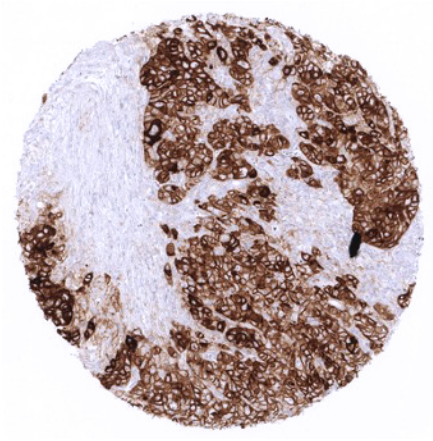
Anti- PD-L1 Antibody
MSVA-711R / Recombinant Rabbit monoclonal

Human SwissProt	Q9NZQ7
Human Gene Symbol	CD274
Synonyms	B7 homolog 1; B7-H1; CD274; PD-L1; PDCD1 ligand 1; PDCD1L1; PDCD1LG1; Programmed cell death 1 ligand 1
Specificity	PD-L1
Immunogen	Recombinant peptide of human PD-L1
Isotype	Rabbit / IgG
Species Reactivity	Human
Localization	Cytoplasmic

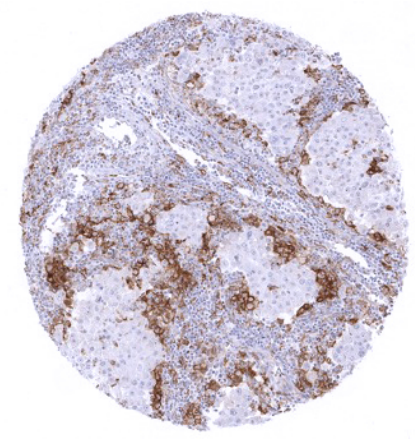
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Alveolar macrophages, tonsil crypt epithelium and the placental cytotrophoblast show strong, predominantly membranous positivity. Follicle centre macrophages should show at least moderate intensity staining.
Negative Control	Appendix (negative staining of all epithelial cells)



Strong membranous PD-L1 staining of trophoblastic cells in the Placenta.



Colorectal adenocarcinoma with intense membranous PD-L1 staining in all tumor cells.



Triple-negative breast cancer with strong PD-L1 immunostaining in tumor associated macrophages immediately adjacent to tumor cells.

Biology

Programmed death-ligand 1 (PD-L1) is a 40kDa type 1 transmembrane protein that plays a major role in suppressing the adaptive immune system. The binding of PD-L1 to the inhibitory checkpoint molecule PD-1 provides an inhibitory signal to lymphocytes. This lowers the proliferation of antigen-specific T-cells in lymph nodes, while simultaneously decreasing apoptosis in regulatory T cells (anti-inflammatory, suppressive T cells). Upregulation of PD-L1 in tumor cells and/or tumor associated macrophages represents a major mechanism by which cancers can evade the host immune response and consecutive tumor cell killing by tumor infiltrating CD8+ T cells or natural killer (NK) cells. PD-L1 is physiologically expressed in dendritic cells and macrophages of lymphoid tissues, alveolar macrophages of the lung, macrophages in mucosa associated tissues of the gastrointestinal tract and – less frequently – monocytic cells in most other organs and tissues. PDL1 is also seen in squamous epithelia of the tonsil crypts, thymic epithelial cells, venous sinuses in the spleen (littoral cells), a variable fraction of cells in the adenohypophysis, corpora l utea of the ovary, and in the placenta, where the outer membrane of the syncytiotrophoblast and chorion cells are immunostained. Various antibody drugs targeting PD-1 and PD-L1 (immune checkpoint inhibitors) have proven effective against several types of cancers, especially if these contain elevated fractions of PD-L1 positive inflammatory or cancer cells.

Potential Research Applications

-Given the role of PD-L1 as a pivotal immune checkpoint, PD-L1 is of critical interest in immuno-oncologic research.
-The quantity of PD-L1 expressing tumor and inflammatory cells and their spatial relationship with effector cells is under investigation for predicting response to immune checkpoint inhibitors targeting the PD1/PD-L1 axis.

Protocol Suggestions

Dilution: 1:150 ; pH9 is optimal. Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

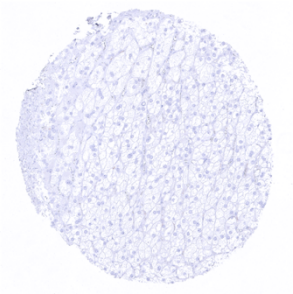
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

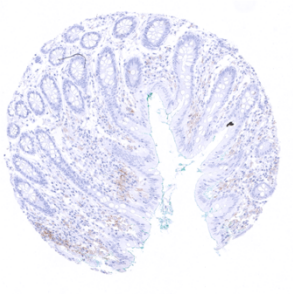
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.

MS
Validated Antibodies

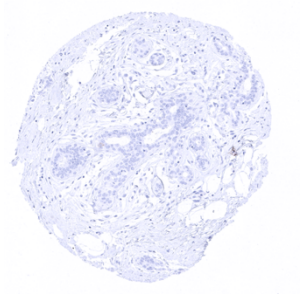
MS Validated Antibodies GmbH
Bergstedter Chaussee 62a
22395 Hamburg, Germany
Tel: +49 (0) 40 89 72 55 81
E-Mail:info@ms-validatedantibodies.com
Website: ms-validatedantibodies.com



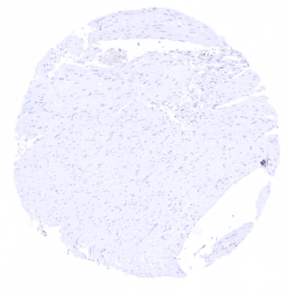
Adrenal gland



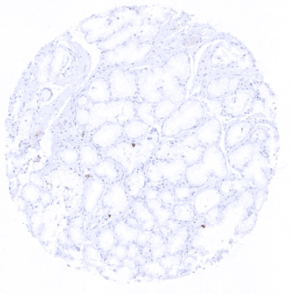
Appendix, mucosa



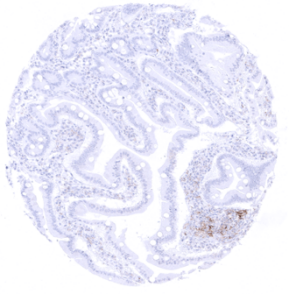
Breast



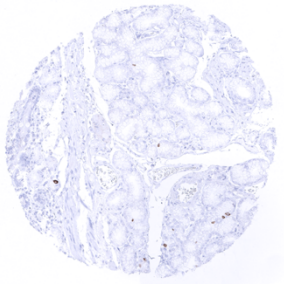
Colon descendens, muscular wall



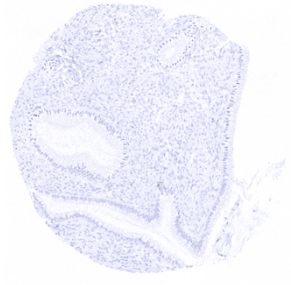
Duodenum, Brunner gland



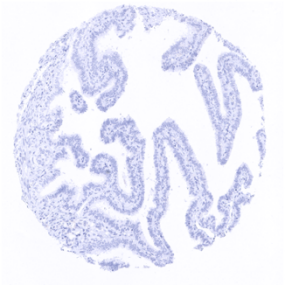
Duodenum, Brunner gland



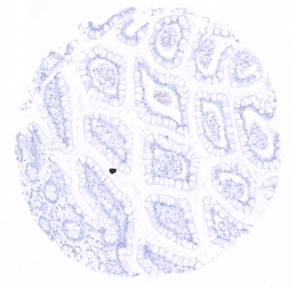
Duodenum, mucosa



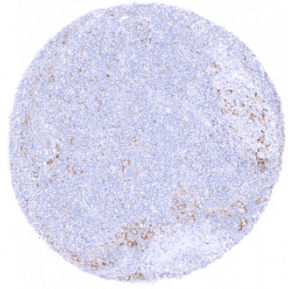
Endocervix



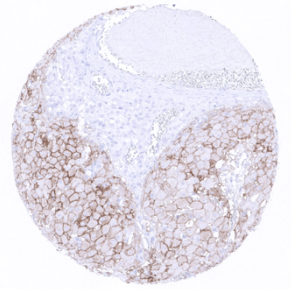
Fallopian tube, mucosa



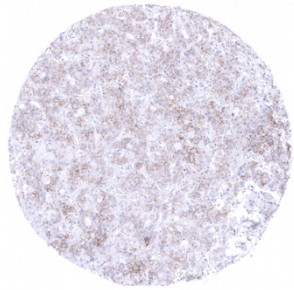
Ileum, mucosa



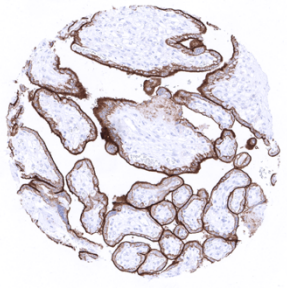
Lymph node



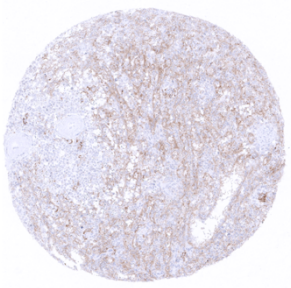
Ovary, corpus luteum



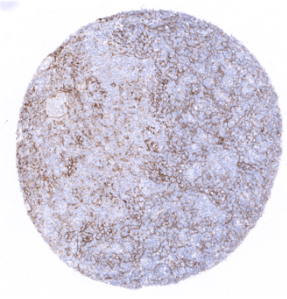
Pituitary, anterior lobe



Placenta, mature



Spleen



Thymus