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PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM597]
Catalog # AH12056

Specification

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - Product Information

Application	**IHC, IF, FC**
Primary Accession	Q15116
Other Accession	5133, 158297
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, kappa**
Calculated MW	**55kDa KDa**

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - Additional Information

Gene ID 5133

Other Names
Programmed cell death protein 1, Protein PD-1, hPD-1, CD279, PDCD1, PD1

Application Note
IHC~~1:100~500<br \>IF~~1:50~200<br \>FC~~1:10~50

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - Protein Information

Name PDCD1 {ECO:0000303|PubMed:7851902, ECO:0000312|HGNC:HGNC:8760}

Function
Inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self (PubMed:21276005, PubMed:37208329). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:21276005). Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3- TCR in the immunological synapse

and directly inhibits T-cell activation (By similarity). Suppresses T-cell activation through the recruitment of PTPN11/SHP-2: following ligand-binding, PDCD1 is phosphorylated within the ITSM motif, leading to the recruitment of the protein tyrosine phosphatase PTPN11/SHP-2 that mediates dephosphorylation of key TCR proximal signaling molecules, such as ZAP70, PRKCQ/PKCtheta and CD247/CD3zeta (By similarity).

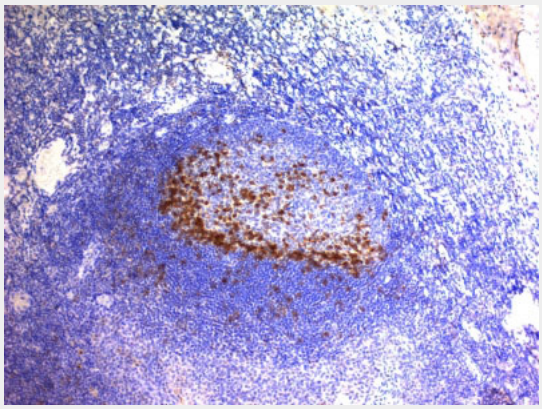
Cellular Location
Cell membrane; Single-pass type I membrane protein

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with PD1 (CD279) Monoclonal Antibody (SPM597).

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - Background

PDCD-1 (programmed cell death-1 protein), also designated CD279, is a type I transmembrane receptor and a member of the immunoglobin gene superfamily. It is expressed on activated T-cells, B-cells, and myeloid cells. Anti-PDCD-1 is a marker of angioimmunoblastic lymphoma and suggests a unique cell of origin for this neoplasm. Unlike CD10 and BCL6, PDCD-1 is expressed by few B-cells, so anti-PDCD-1 may be a more specific and useful diagnostic marker in angioimmunoblastic lymphoma. In addition, PDCD-1 expression provides evidence that angioimmunoblastic lymphoma is a neoplasm derived from germinal center-associated T-cells.

PD1 / PDCD1 / CD279 (Programmed Cell Death 1) Antibody - With BSA and Azide - References

Roncador, G., Verdes-Montenegro, J.F.G., Tedoldi, S., Paterson, J.C., Klapper, W., Ballabio, E., Maestre, L., Pileri, S., Hansmann, M.L, Piris, M.A., Mason, D.Y., Marafioti, T. Expression of two markers of germinal center T cells (SAP and PD-1) in angioimmunoblastic T-cell lymphoma. Haematologica. 2007 Aug;92(8):1059-66. |