

Anti-PDCD1 / CD279 / PD-1 Antibody (clone 4E5)

Mouse Anti Human Monoclonal Antibody

Catalog # ALS17346

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	Q15116
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	4E5
Calculated MW	31647
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	5133
Alias Symbol	PDCD1
Other Names	PDCD1, CD279, HPD-1, HPD-I, PD1, Protein PD-1, SLEB2, PD-1, CD279 antigen, Programmed cell death 1
Target/Specificity	Human PDCD1 / CD279 / PD-1
Reconstitution & Storage	PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide Store at -20°C. Minimize freezing and thawing.
Precautions	Anti-PDCD1 / CD279 / PD-1 Antibody (clone 4E5) is for research use only and not for use in diagnostic or therapeutic procedures.

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: 31754127 , PubMed: 32184441 , PubMed: 37208329). Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed: 21276005 , PubMed: 26602187). Following T-cell receptor (TCR) engagement, PDCD1 associates with TCR-CD3 in the immunological synapse and directly inhibits T-cell activation (PubMed: 32184441). 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 (PubMed:[32184441](#)).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.