10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CD226 Antibody

Catalog # AP61521

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q15762
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38614

Additional Information

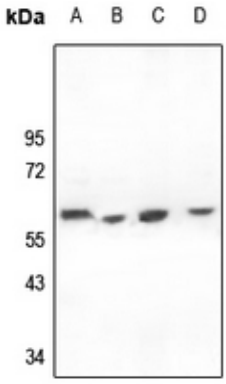
Gene ID	10666
Other Names	DNAM1; CD226 antigen; DNAX accessory molecule 1; DNAM-1; CD226
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD226. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

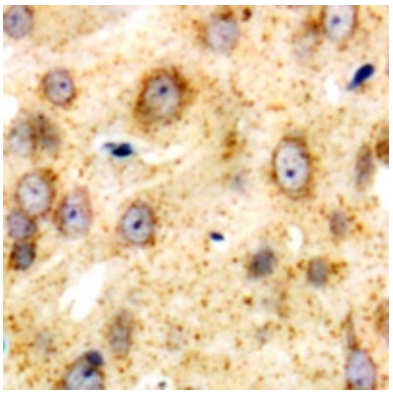
Name	CD226
Synonyms	DNAM1
Function	Cell surface receptor that plays an important role in the immune system, particularly in intercellular adhesion, lymphocyte signaling, cytotoxicity and lymphokine secretion mediated by cytotoxic T-cells and NK cells (PubMed:8673704, PubMed:9712030). Functions as a costimulatory receptor upon recognition of target cells, such as virus- infected or tumor cells. Upon binding to its ligands PVR/CD155 or NECTIN2/CD112 on target cells, promotes the cytotoxic activity of NK cells and CTLs, enhancing their ability to kill these cells (PubMed:26755705, PubMed:31253644, PubMed:30591568). Mechanistically, phosphorylation by Src kinases such as LYN of FYN, enables binding to adapter GRB2, leading to activation of VAV1, PI3K and PLCG1. Promotes also activation of kinases ERK and AKT, as well as calcium fluxes (By similarity).

Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Localizes to lipid rafts.
Tissue Location	Expressed by peripheral blood T-lymphocytes.

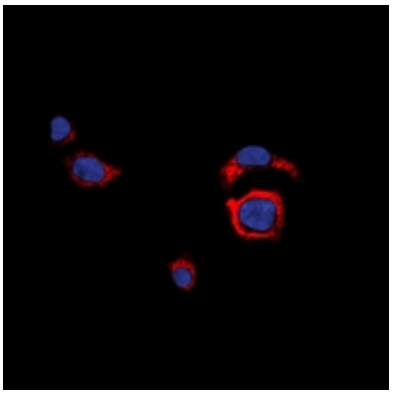
Images



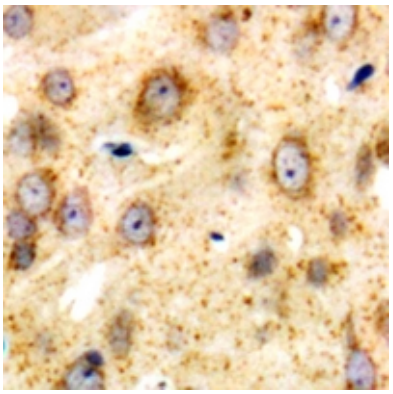
Western blot analysis of CD226 expression in LO2 (A), U87MG (B), C6 (C), Raw264.7 (D) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 65 kD)



Immunohistochemical analysis of CD226 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CD226 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



Immunohistochemical analysis of CD226 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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