

Anti-CD226 Antibody

Rabbit polyclonal antibody to CD226 Catalog # AP61521

Product Information

Application WB, IF/IC, IHC

Primary Accession Q15762
Other Accession Q8K4F0

Reactivity Human, Mouse, Rat, Monkey

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 Recognizes endogenous levels of CD226 protein.

Dilution WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 -

1/500)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) 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:<u>8673704</u>, PubMed:<u>9712030</u>). 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: <u>26755705</u>, PubMed: <u>31253644</u>, PubMed: <u>30591568</u>).

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

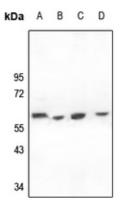
rafts.

Tissue Location Expressed by peripheral blood T-lymphocytes.

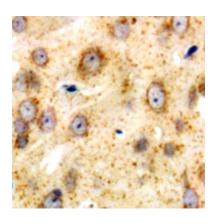
Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human CD226. The exact sequence is proprietary.

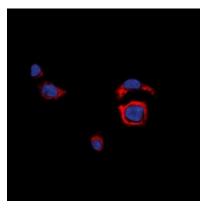
Images



Western blot analysis of CD226 expression in LO2 (A), U87MG (B), C6 (C), Raw264.7 (D) whole cell lysates.



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).

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