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CXADR Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2852c

Product Information

Application	WB, FC, E
Primary Accession	P78310
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17619
Calculated MW	40030
Antigen Region	132-161

Additional Information

Gene ID	1525
Other Names	Coxsackievirus and adenovirus receptor, CAR, hCAR, CVB3-binding protein, Coxsackievirus B-adenovirus receptor, HCVADR, CXADR, CAR
Target/Specificity	This CXADR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 132-161 amino acids from the Central region of human CXADR.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CXADR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CXADR
Synonyms	CAR
Function	Component of the epithelial apical junction complex that may function as a homophilic cell adhesion molecule and is essential for tight junction integrity.

	Also involved in transepithelial migration of leukocytes through adhesive interactions with JAML a transmembrane protein of the plasma membrane of leukocytes. The interaction between both receptors also mediates the activation of gamma-delta T-cells, a subpopulation of T-cells residing in epithelia and involved in tissue homeostasis and repair. Upon epithelial CXADR-binding, JAML induces downstream cell signaling events in gamma-delta T-cells through PI3- kinase and MAP kinases. It results in proliferation and production of cytokines and growth factors by T-cells that in turn stimulate epithelial tissues repair.
Cellular Location	[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Basolateral cell membrane; Single-pass type I membrane protein. Cell junction, tight junction. Cell junction, adherens junction. Note=In epithelial cells localizes to the apical junction complex composed of tight and adherens junctions (PubMed:12297051). In airway epithelial cells localized to basolateral membrane but not to apical surface (PubMed:11316797). [Isoform 4]: Secreted
Tissue Location	Expressed in pancreas, brain, heart, small intestine, testis, prostate and at a lower level in liver and lung Isoform 5 is ubiquitously expressed. Isoform 3 is expressed in heart, lung and pancreas. In skeletal muscle, isoform 1 is found at the neuromuscular junction and isoform 2 is found in blood vessels. In cardiac muscle, isoform 1 and isoform 2 are found at intercalated disks. In heart expressed in subendothelial layers of the vessel wall but not in the luminal endothelial surface. Expression is elevated in hearts with dilated cardiomyopathy.

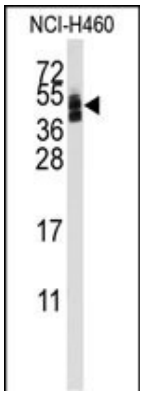
Background

CXADR is a type I membrane receptor for group B coxsackieviruses and subgroup C adenoviruses.

References

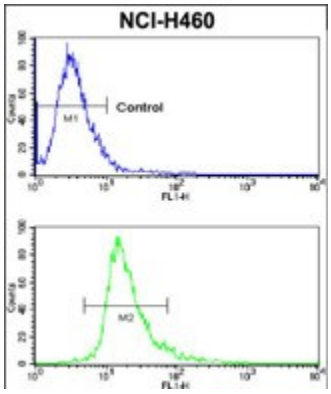
Tomko R.P., Xu R., Philipson L.Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997)
Bowles K.R., Gibson J.,Hum. Genet. 105:354-359(1999)
Fechner H., Haack A., Wang H., Wang X.Gene Ther. 6:1520-1535(1999)
Martino T.A., Petric M., Weingartl H.Virology 271:99-108(2000)
Ashbourne-Excoffon K.J.D., Hruska-Hageman A.M.J. Cell Sci. 117:4401-4409(2004)

Images



Western blot analysis of anti-CXADR Antibody (Center) (Cat.#AP2852c) in NCI-H460 cell line lysates (35ug/lane). CXADR(arrow) was detected using the purified Pab.

Flow cytometric analysis of NCI-H460 cells using CXADR Antibody (Center) (bottom histogram) compared to a



negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.