

# CXADR Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51754

# Specification

# CXADR Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Antigen Region WB <u>P78310</u> Human, Mouse, Rat Rabbit Polyclonal 46 KDa 21 - 80

# **CXADR Antibody - 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** KLH conjugated synthetic peptide derived from human CXADR

Dilution WB~~ 1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### **CXADR Antibody - 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**

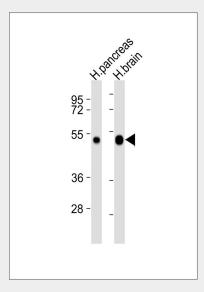
Expressed in pancreas, brain, heart, small intestine, testis, prostate and at a lower level in liver and lung lsoform 5 is ubiquitously expressed. Isoform 3 is expressed in heart, lung and pancreas. In skeletal muscle, isoform 1 is found at the neuromuscular junction and isoform 2 is found in blood vessels. 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.

# **CXADR Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **CXADR Antibody - Images**



All lanes : Anti-CXADR Antibody at 1:1000 dilution Lane 1: human pancreas lysates Lane 2: human brain lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



# CXADR Antibody - Background

Component of the epithelial apical junction complex that may function as an homophilic cell adhesion molecule and is essential for tight junction integrity. Also involved in transepithelial migration of leukocytes through adhesive interactions with AMICA1/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, AMICA1 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.

# **CXADR Antibody - References**

Tomko R.P., et al. Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997). Bergelson J.M., et al. Science 275:1320-1323(1997). Bowles K.R., et al. Hum. Genet. 105:354-359(1999). He Y., et al. Nat. Struct. Biol. 8:874-878(2001). Doerner A., et al.J. Biol. Chem. 279:18497-18503(2004).