

# **CXADR Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP2852c

## **Specification**

## **CXADR Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

P78310

## CXADR Antibody (Center) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody <a href=/products/AP2852c>AP2852c</a> was selected from the Center region of human CXADR. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### CXADR Antibody (Center) Blocking Peptide - 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.

## **CXADR Antibody (Center) Blocking Peptide - Protocols**

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

Blocking Peptides

**CXADR Antibody (Center) Blocking Peptide - Images** 

CXADR Antibody (Center) Blocking Peptide - Background

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

### **CXADR Antibody (Center) Blocking Peptide - 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)