

## **CXADR Antibody (Internal)**

Rabbit Polyclonal Antibody Catalog # ALS11026

# **Specification**

## **CXADR Antibody (Internal) - Product Information**

Application IHC-P
Primary Accession P78310

Reactivity Human, Mouse, Rabbit, Hamster, Monkey,

Pig, Horse, Bovine, Guinea Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 40kDa KDa
Dilution IHC-P~~N/A

## **CXADR Antibody (Internal) - 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

Human CXADR. BLAST analysis of the peptide immunogen showed no homology with other human proteins. Immunogenic peptide is present in isoforms 1 and 2 per Swiss-Prot P78310.

#### **Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

#### **Precautions**

CXADR Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

# **CXADR Antibody (Internal) - 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.

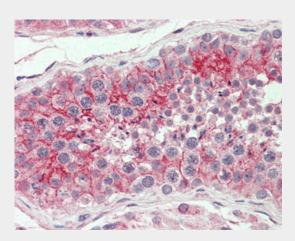
**Volume** 50 μl

# CXADR Antibody (Internal) - Protocols

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

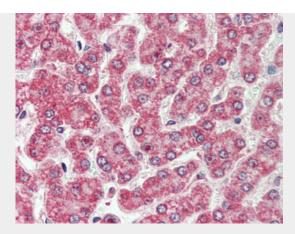
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### **CXADR Antibody (Internal) - Images**



Anti-CXADR antibody ALS11026 IHC of human testis.





Anti-CXADR antibody ALS11026 IHC of human liver.

## **CXADR Antibody (Internal) - 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 (Internal) - 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).