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CXADR Antibody
Mouse Monoclonal Antibody
Catalog # ALS15295

Specification

CXADR Antibody - Product Information

Application	**WB, IHC-P, ICC**
Primary Accession	P78310
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**40kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **ICC~~N/A**

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
Recognizes human CAR at ~46kD. Species Crossreactivity: mouse and rat.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
CXADR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

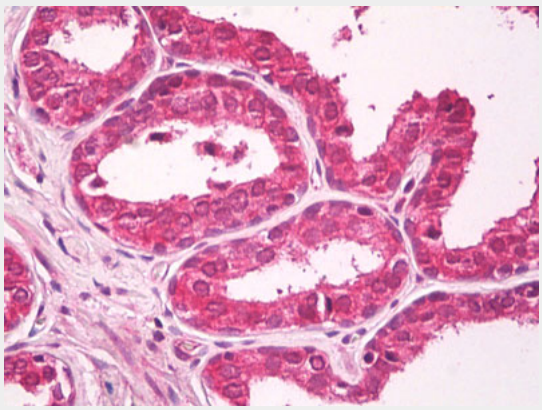
Tissue Location
Expressed in pancreas, brain, heart, small intestine, testis, prostate and at a lower level in liver and lung Isoform 5 is ubiquitously expressed. Isoform 3 is expressed in heart, lung and pancreas. In skeletal muscle, isoform 1 is found at the neuromuscular junction and isoform 2 is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

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CXADR Antibody - Images



Anti-CXADR antibody IHC of human prostate.

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).
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Bowles K.R.,et al.Hum. Genet. 105:354-359(1999).
He Y.,et al.Nat. Struct. Biol. 8:874-878(2001).
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