

Anti-Coxsackie Adenovirus Receptor Antibody

Catalog # ABO11160

Product Information

Application	WB
Primary Accession	P78310
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Coxsackievirus and adenovirus receptor(CXADR) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1525
Other Names	Coxsackievirus and adenovirus receptor, CAR, hCAR, CVB3-binding protein, Coxsackievirus B-adenovirus receptor, HCVADR, CXADR, CAR
Calculated MW	40030
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse
Subcellular Localization	Isoform 1: Cell membrane; Single-pass type I membrane protein. Cell junction, tight junction. Cell junction, adherens junction. Basolateral cell membrane; Single-pass type I membrane protein. In epithelial cells localizes to the apical junction complex composed of tight and adherens junctions. In airway epithelial cells localized to basolateral membrane but not to apical surface.
Tissue Specificity	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. .
Source	Eukaryota
Protein Name	Coxsackievirus and adenovirus receptor(CAR/hCAR)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg

Thimerosal, 0.05mg NaN3.

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Coxsackie Adenovirus Receptor(313-328aa YSKTQYNQVPSEDFER), identical to the related rat and mouse sequences.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.

Protein Information

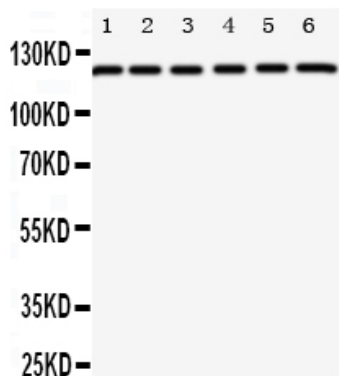
Name	CXADR
Synonyms	CAR
Function	Component of the epithelial apical junction complex that may function as a homophilic cell adhesion molecule and is essential for tight junction integrity. Also involved in transepithelial migration of leukocytes through adhesive interactions with JAML a transmembrane 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(Coxsackie virus and adenovirus receptor) is a protein that in humans is encoded by the CXADR gene, also known as CAR,CVB3-binding protein, Coxsackievirus B-adenovirus receptor. The CAR cDNA encodes a predicted 365-amino acid polypeptide that contains a single transmembrane domain and is a member of the immunoglobulin superfamily. By Northern blot analysis, they detected highest expression of 1.4-kb and 6-kb CXADR transcripts in pancreas, brain, heart, small intestine, testis, and prostate, lower expression in liver and lung, and no expression in kidney, placenta, peripheral blood leukocytes, thymus, and spleen. In comparison, mouse Cxadr showed highest expression in liver, and lower levels in kidney, heart, lung, and

brain. The protein encoded by this gene is a type I membrane receptor for group B coxsackie viruses and subgroup C adenoviruses. Pseudogenes of this gene are found on chromosomes 15, 18, and 21. CAR is strongly expressed in the developing central nervous system. It functions as a homophilic and also as a heterophilic cell adhesion molecule through its interactions with extracellular matrix glycoproteins , such as: fibronectin, agrin, laminin-1 and tenascin-R.

Images



Anti-Coxsackie Adenovirus Receptor antibody, ABO11160, Western blotting
All lanes: Anti Coxsackie Adenovirus Receptor (ABO11160) at 0.5ug/ml
Lane 1: Rat Pancreas Tissue Lysate at 50ug
Lane 2: Rat Brain Tissue Lysate at 50ug
Lane 3: Rat Heart Tissue Lysate at 50ug
Lane 4: HELA Whole Cell Lysate at 40ug
Lane 5: 293T Whole Cell Lysate at 40ug
Lane 6: COLO320 Whole Cell Lysate at 40ug
Predicted bind size: 120KD
Observed bind size: 120KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.