



Renin Receptor Polyclonal Antibody

Catalog No	YP-Ab-01975
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	ATP6AP2
Protein Name	Renin receptor
Immunogen	The antiserum was produced against synthesized peptide derived from human Capex. AA range:171-220
Specificity	Renin Receptor Polyclonal Antibody detects endogenous levels of Renin Receptor protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATP6AP2; ATP6IP2; CAPER; ELDF10; HT028; MSTP009; PSEC0072; Renin receptor; ATPase H(+)-transporting lysosomal accessory protein 2; ATPase H(+)-transporting lysosomal-interacting protein 2; ER-localized type I transmembrane adaptor; Embryoni
Observed Band	39kD
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass type I membrane protein . Lysosome membrane ; Single-pass type I membrane protein . Cytoplasmic vesicle, autophagosome membrane ; Single-pass type I membrane protein . Cell projection, dendritic spine membrane ; Single-pass type I membrane protein . Cell projection, axon . Endosome membrane ; Single-pass type I membrane protein . Cytoplasmic vesicle, clathrin-coated vesicle membrane ; Single-pass type I membrane protein . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane ; Single-pass type I membrane protein .
Tissue Specificity	Expressed in brain, heart, placenta, liver, kidney and pancreas. Barely detectable in lung and skeletal muscles. In the kidney cortex it is restricted to the mesangium of glomeruli. In the coronary and kidney artery it is expressed in the subendothelium, associated to smooth muscles where it colocalizes with REN. Expressed in vascular structures and by syncytiotrophoblast cells in the mature fetal placenta.


Function

disease: Defects in ATP6AP2 are a cause of mental retardation X-linked with epilepsy (MRXE) [MIM:300423]. MRXE is a syndromic mental retardation. Patients manifest mild to moderate mental retardation associated with epilepsy, delays in motor milestones and speech acquisition in infancy. function: Functions as a renin and prorenin cellular receptor. May mediate renin-dependent cellular responses by activating ERK1 and ERK2. By increasing the catalytic efficiency of renin in AGT/angiotensinogen conversion to angiotensin I, it may also play a role in the renin-angiotensin system (RAS). PTM: Phosphorylated. subunit: Interacts with renin and the vacuolar proton-ATPase. tissue specificity: Expressed in brain, heart, placenta, liver, kidney and pancreas. Barely detectable in lung and skeletal muscles. In the kidney cortex it is restricted to the mesangium of glomeruli. In the coronary and kidney art

Background

This gene encodes a protein that is associated with adenosine triphosphatases (ATPases). Proton-translocating ATPases have fundamental roles in energy conservation, secondary active transport, acidification of intracellular compartments, and cellular pH homeostasis. There are three classes of ATPases- F, P, and V. The vacuolar (V-type) ATPases have a transmembrane proton-conducting sector and an extramembrane catalytic sector. The encoded protein has been found associated with the transmembrane sector of the V-type ATPases. [provided by RefSeq, Jul 2008],

matters needing attention

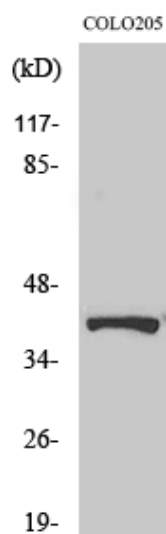
Avoid repeated freezing and thawing!

Usage suggestions

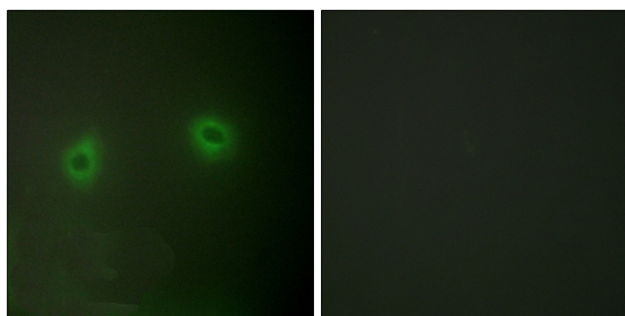
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



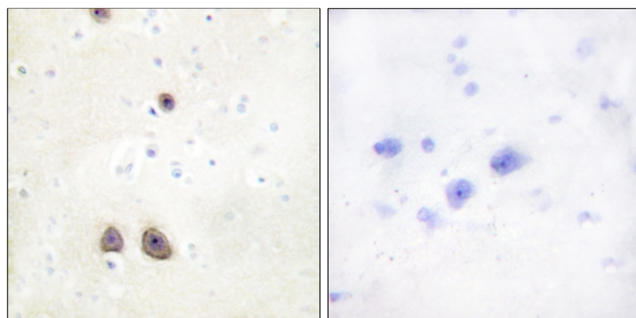
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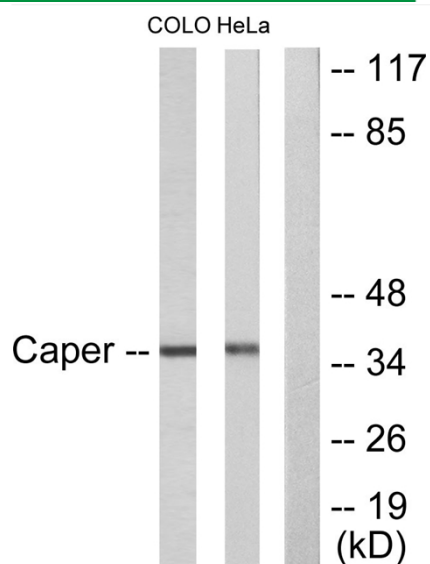
Western Blot analysis of various cells using Renin Receptor Polyclonal Antibody



Immunofluorescence analysis of HeLa cells, using Caper Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Caper Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO205 and HeLa cells, using Caper Antibody. The lane on the right is blocked with the synthesized peptide.