

Renin Receptor Polyclonal Antibody

Catalog No :	YT4048
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Renin Receptor
Fields :	>>Renin-angiotensin system
Gene Name :	ATP6AP2
Protein Name :	Renin receptor
Human Gene Id :	10159
Human Swiss Prot No :	O75787
Mouse Gene Id :	70495
Mouse Swiss Prot No :	Q9CYN9
Rat Gene Id :	302526
Rat Swiss Prot No :	Q6AXS4
Immunogen :	The antiserum was produced against synthesized peptide derived from human Caper. 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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 39kD

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],

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

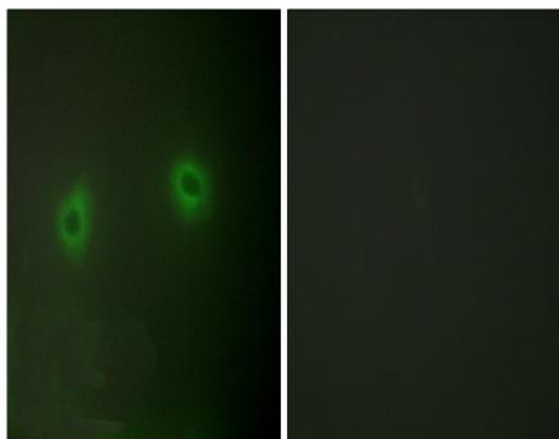
Subcellular Location : Endoplasmic reticulum membrane ; Single-pass type I membrane protein . Lysosome membrane ; Single-pass type I membrane protein . Cytoplasmic vesicle, autophagosome membrane ; Single-pass type I membrane protein . Cell projection, dendritic spine membrane ; Single-pass type I membrane 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 .

Expression : 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.

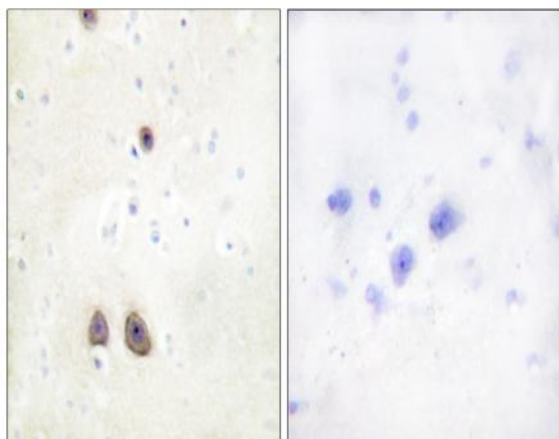
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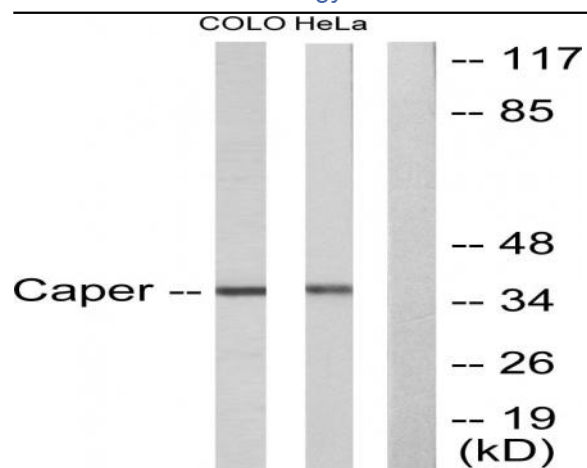
Western Blot analysis of various cells using Renin Receptor Polyclonal Antibody



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.