Antigen: Synthetic peptide corresponding to Human Renin Receptor (internal sequence).

Positive control: Human brain tissue COLO205 and HeLa cell extracts HeLa cells

General notes: Protein target previously labeled as POU3F2.

Properties

Form: Liquid

Storage instructions: Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer: pH: 7.40
Preservative: 0.02% Sodium azide
Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

Without Mg2+ and Ca2+

Purity: Immunogen affinity purified

Clonality: Polyclonal

Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab64957 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
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).

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.

Involvement in 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.

Post-translational modifications
Phosphorylated.

Cellular localization
Membrane.
Immunohistochemical analysis of paraffin-embedded human brain tissue using ab64957 at 1/50 dilution. Right hand panel was also treated with immunising peptide.

Immunofluorescence analysis of HeLa cells, using ab64957 at 1/500 dilution. Right hand panel was also treated with immunising peptide.

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