



# IHCeasy ATP6AP2 Ready-To-Use IHC Kit

Catalog Number: KHC2120

General Information

Sample type: FFPE tissue Cited sample type: Reactivity: Human, Mouse, Rat Cited Reactivity: Assay type: Immunohistochemistry Primary antibody type: Rabbit Polyclonal

Secondary antibody type: Polymer-HRP-Goat anti-Rabbit

#### Kit Component

Antigen Retrieval Buffer 100 mL	50×
Washing Buffer 100 mL × 2	20×
Blocking Buffer 5 mL	RTU
Primary Antibody 5 mL	RTU
Secondary Antibody 5 mL	RTU
Chromogen Component A 0.2 mL	RTU
Chromogen Component B 4 mL	RTU
Signal Enhancer 5 mL	RTU
Counter Staining Reagent 5 mL	RTU
Mounting Media 5 mL	RTU
Control Slide 1 slide (Optional)	FFPE
Datasheet 1 Copy	
Manual 1 Copy	

### Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

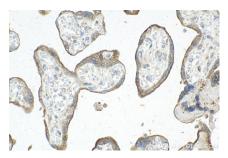
### Background

ATP6AP2, also named as ATP6IP2, CAPER, ELDF10, N14F, ATP6M8-9, Renin receptor, and prorenin receptor, is believed to potentiate the renin-angiotensin system (RAS), conferring to prorenin, a likely pathological role at the tissue level. The PRR has been identified in the microvascular endothelial cells of the retina, which seems to be involved in pathological neovascularization processes. The present study demonstrates for the first time that the PRR is expressed in human ATP6AP2 and suggests a molecular mechanism by which hypertension may exacerbate the pathology of dry AMD. ATP6AP2 functions as a renin and prorenin cellular receptor. It 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). Defects in ATP6AP2 are a cause of mental retardation X-linked with epilepsy (MRXE).

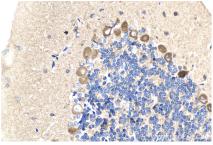
#### **Synonyms**

Renin receptor, ATPase H(+)-transporting lysosomal-interacting protein 2, ATPase H(+)-transporting lysosomal accessory protein 2, ATP6M8-9, ATP6M8 9

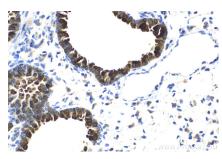
## Selected Validation Data



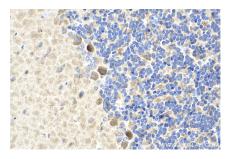
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using KHC2120 (ATP6AP2 IHC Kit).



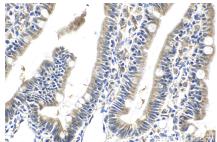
Immunohistochemical analysis of paraffinembedded mouse cerebellum tissue slide using KHC2120 (ATP6AP2 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse lung tissue slide using KHC2120 (ATP6AP2 IHC Kit).



Immunohistochemical analysis of paraffinembedded rat cerebellum tissue slide using KHC2120 (ATP6AP2 IHC Kit).



Immunohistochemical analysis of paraffinembedded rat small intestine tissue slide using KHC2120 (ATP6AP2 IHC Kit).