

NCKX1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51865

Product Information

Application	WB, ICC
Primary Accession	O60721
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	121374

Additional Information

Gene ID	9187
Other Names	Sodium/potassium/calcium exchanger 1, Na(+)/K(+)/Ca(2+)-exchange protein 1, Retinal rod Na-Ca+K exchanger, Solute carrier family 24 member 1, SLC24A1, KIAA0702, NCKX1
Dilution	WB~~1:1000 ICC~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SLC24A1 {ECO:0000303 PubMed:20850105, ECO:0000312 HGNC:HGNC:10975}
Function	Calcium, potassium:sodium antiporter that transports 1 Ca(2+) and 1 K(+) in exchange for 4 Na(+) (PubMed: 26631410). Critical component of the visual transduction cascade, controlling the calcium concentration of outer segments during light and darkness (PubMed: 20850105). Light causes a rapid lowering of cytosolic free calcium in the outer segment of both retinal rod and cone photoreceptors and the light-induced lowering of calcium is caused by extrusion via this protein which plays a key role in the process of light adaptation (PubMed: 20850105).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed in the retina, particularly in the inner segment, outer and inner nuclear layers, and ganglion cell layer

Background

Critical component of the visual transduction cascade, controlling the calcium concentration of outer segments during light and darkness. Light causes a rapid lowering of cytosolic free calcium in the outer segment of both retinal rod and cone photoreceptors and the light-induced lowering of calcium is caused by extrusion via this protein which plays a key role in the process of light adaptation. Transports 1 Ca^{2+} and 1 K^{+} in exchange for 4 Na^{+} .

References

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Tucker J.E.,et al.Invest. Ophthalmol. Vis. Sci. 39:435-440(1998).
Ishikawa K.,et al.DNA Res. 5:169-176(1998).
McKiernan C.J.,et al.J. Biol. Chem. 274:38177-38182(1999).
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