

NCKX1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51865

Specification

NCKX1 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, ICC, E
060721
Human, Mouse
Rabbit
Polyclonal
121 KDa

NCKX1 Antibody - 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 E~~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

NCKX1 Antibody - 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

NCKX1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

NCKX1 Antibody - Images

NCKX1 Antibody - 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(+).

NCKX1 Antibody - References

Tucker J.E., et al. Hum. Genet. 103:411-414(1998). 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). Mayya V., et al. Sci. Signal. 2:RA46-RA46(2009).