

NHEDC2 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17738b**Specification**

NHEDC2 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	Q86UD5
Other Accession	Q5BKR2 , NP_849155.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57564
Antigen Region	458-486

NHEDC2 Antibody (C-term) - Additional Information**Gene ID** 133308**Other Names**

Mitochondrial sodium/hydrogen exchanger 9B2, Mitochondrial Na(+)/H(+) exchanger NHA2, Na(+)/H(+) exchanger-like domain-containing protein 2, NHE domain-containing protein 2, Sodium/hydrogen exchanger-like domain-containing protein 2, Solute carrier family 9 subfamily B member 2, SLC9B2, NHA2, NHEDC2

Target/Specificity

This NHEDC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 458-486 amino acids from the C-terminal region of human NHEDC2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

NHEDC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NHEDC2 Antibody (C-term) - Protein Information

Name SLC9B2 ([HGNC:25143](#))

Synonyms NHA2, NHEDC2

Function Electroneutral Na(+) Li(+)/H(+) antiporter that extrudes Na(+) or Li(+) in exchange for external protons across the membrane (PubMed:[18000046](#), PubMed:[18508966](#), PubMed:[22948142](#), PubMed:[28154142](#), PubMed:[36177733](#)). Uses the proton gradient/membrane potential to extrude sodium (PubMed:[22948142](#)). Contributes to the regulation of intracellular pH and sodium homeostasis (By similarity). Also able to mediate Na(+)/Li(+) antiporter activity in kidney (PubMed:[22948142](#)). May play a physiological role in renal tubular function and blood pressure homeostasis (By similarity). Plays an important role for insulin secretion and clathrin-mediated endocytosis in beta-cells (By similarity). Involved in sperm motility and fertility (By similarity). It is controversial whether SLC9B2 plays a role in osteoclast differentiation or not (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Mitochondrion membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Endosome membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Recycling endosome membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Cell projection, cilium, flagellum membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Basolateral cell membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Apical cell membrane {ECO:0000250|UniProtKB:Q5BKR2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:A0A6P3HVI0}. Note=Strong colocalization with LAMP1 and TCIRG1 in osteoclasts. In beta-cells colocalizes with RAB4A and SYP. Localizes to the basolateral membrane of polarized osteoclasts. {ECO:0000250|UniProtKB:Q5BKR2}

Tissue Location

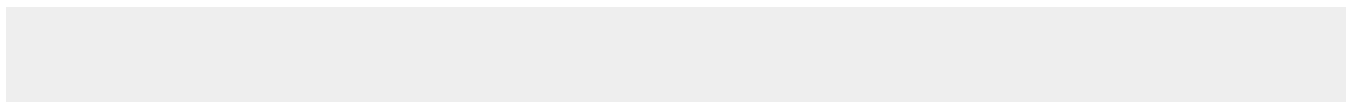
Widely expressed (PubMed:18508966). High levels detected in the distal tubules of the kidney nephron (PubMed:18508966) Detected in red blood cells (at protein level) (PubMed:18000046, PubMed:18508966).

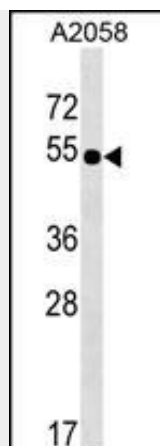
NHEDC2 Antibody (C-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NHEDC2 Antibody (C-term) - Images





NHEDC2 Antibody (C-term) (Cat. #AP17738b) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the NHEDC2 antibody detected the NHEDC2 protein (arrow).

NHEDC2 Antibody (C-term) - Background

Sodium hydrogen antiporters, such as NHEDC2, convert the proton motive force established by the respiratory chain or the F1F0 mitochondrial ATPase into sodium gradients that drive other energy-requiring processes, transduce environmental signals into cell responses, or function in drug efflux (Xiang et al., 2007 [PubMed 18000046]).

NHEDC2 Antibody (C-term) - References

Kalsi, G., et al. Hum. Mol. Genet. 19(12):2497-2506(2010)
Schushan, M., et al. J. Mol. Biol. 396(5):1181-1196(2010)
Fuster, D.G., et al. J. Am. Soc. Nephrol. 19(8):1547-1556(2008)
Battaglini, R.A., et al. Bone 42(1):180-192(2008)
Xiang, M., et al. Proc. Natl. Acad. Sci. U.S.A. 104(47):18677-18681(2007)