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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

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:28154142, PubMed:22948142, PubMed:18508966, 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).

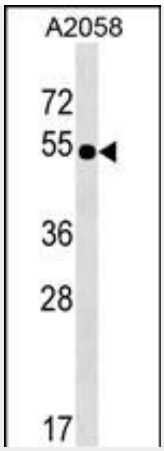
NHEDC2 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NHEDC2 Antibody (C-term) - Images

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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

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Fuster, D.G., et al. J. Am. Soc. Nephrol. 19(8):1547-1556(2008)
Battaglino, 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)