

Datasheet for ABIN3122421

NHEDC2 Protein (AA 1-547) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	NHEDC2
Protein Characteristics:	AA 1-547
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NHEDC2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MEDEDKTAEC QHSPPTGIT HEAPPHHELQ EERVMSLRGT DRSEPTEGSN LLTSGEKKPQ DSPTEPNGLQ SLRRFLACPP RGCLARVITN GTMVLLWAM VWSVTGPECL PGGNLFGLII LFYCSITGGK LFGLIKFPTL PPLPPLGML LAGFLLRNIP VINDSVRIQH KWSSSLRSIA LSVILVRAGL GLDSKALRKL KGVCVRLAMG PCIVEACASA ILSHFLMGLP WQWGFILGFV VGAVSPAVVV PSMALLQEGG YGVGKGIPTL LMAAGSFDDI LAITGFNTCL GVAFTSTGSTV FNIFRGILEV VIGVAAGSFL GFFIQYFPSR DQDNLVWKRA FLVLGFAVLA VFSSVYFSFP GSGGLCTLVM AFLAGMRWTD KKSEVEKVIA VTWDVFQPLL FGLIGAEVSI VSLRAETVGL CVATLSIAVL IRILTTFLMV CFAGFNIKEK IFISFAWLPK ATVQAAIGSV ALDTARSHGE KQLEDYGMDV LTVAFLAILI TAPIGSLIG LLGPRVLQKS EHRTEEEVQG ETSAHQIRKP EDSITEA</p> <p>Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you</p>

have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade:

custom-made

Target Details

Target:	NHEDC2
Alternative Name:	Slc9b2 (NHEDC2 Products)
Background:	<p>Sodium/hydrogen exchanger 9B2 (NHA-oc) (Na(+)/H(+) exchanger NHA2) (Na(+)/H(+) exchanger-like domain-containing protein 2) (NHE domain-containing protein 2) (Soditlum/hydrogen exchanger-like domain-containing protein 2) (Solute carrier family 9 subfamily B member 2),FUNCTION: Electroneutral Na(+)/Li(+)/H(+) antiporter that extrudes Na(+) or Li(+) in exchange for external protons across the membrane (PubMed:18508966, PubMed:17988971). Uses the proton gradient/membrane potential to extrude sodium (By similarity). Contributes to the regulation of intracellular pH and sodium homeostasis (PubMed:27909897). Also able to mediate Na(+)/Li(+) antiporter activity in kidney (By similarity). May play a physiological role in renal tubular function and blood pressure homeostasis (PubMed:32956652, PubMed:27909897). Plays an important role for insulin secretion and clathrin-mediated endocytosis in beta-cells (PubMed:23720317). Involved in sperm motility and fertility (PubMed:27010853). It is controversial whether SLC9B2 plays a role in osteoclast differentiation or not (PubMed:20441802, PubMed:17988971).</p> <p>{ECO:0000250 UniProtKB:Q86UD5, ECO:0000269 PubMed:17988971, ECO:0000269 PubMed:18508966, ECO:0000269 PubMed:20441802, ECO:0000269 PubMed:23720317, ECO:0000269 PubMed:27010853, ECO:0000269 PubMed:27909897, ECO:0000269 PubMed:32956652}.</p>
Molecular Weight:	58.9 kDa
UniProt:	Q5BKR2
Pathways:	Proton Transport

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the</p>

Application Details

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months