

Datasheet for ABIN3114147

ASIC1 Protein (AA 1-528) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	ASIC1 (ACCN2)
Protein Characteristics:	AA 1-528
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ASIC1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MELKAEEEV GGVQPVSIQA FASSSTLHGL AHFSYERLS LKRALWALCF LGSLAVLLCV CTERVQYYFH YHHVTKLDEV AASQLTFPAV TLCNLNEFRF SQVSKNDLYH AGELLALLNN RYEIPDTQMA DEKQLEILQD KANFRSFKPK PFNMREFYDR AGHDIRDMLL SCHFRGEVCS AEDFKVVFTR YGKCYTFNSG RDGRPRLKTM KGGTGNGLEI MLDIQQDEYL PVWGETDETS FEAGIKVQIH SQDEPPFIDQ LGFGVAPGFQ TFVACQEQL IYLPWPWGTC KAVTMDSDL FFDSYSITAC RIDCETRYLV ENCNCRMVHM PGDAPYCTPE QYKECADPAL DFLVEKDQEY CVCEMPCNLT RYKELSMVK IPSKASAKYL AKKFNKSEY IGENILVLDI FFEVLNYETI EQKKAYEIA GLLGDIGGQMG LFIGASILTV LELFDYAYEV IKHKLCRRGK CQKEAKRSSA DKGVALSLDD VKRHNPCESL RGHPAGMTYA ANILPHHPAR GTFEDFTC</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:	ASIC1 (ACCN2)
Alternative Name:	ASIC1 (ACCN2 Products)
Background:	<p>Acid-sensing ion channel 1 (ASIC1) (Amiloride-sensitive cation channel 2, neuronal) (Brain sodium channel 2) (BNAc2),FUNCTION: Isoform 2 and isoform 3 function as proton-gated sodium channels, they are activated by a drop of the extracellular pH and then become rapidly desensitized. The channel generates a biphasic current with a fast inactivating and a slow sustained phase. Has high selectivity for sodium ions and can also transport lithium ions with high efficiency. Isoform 2 can also transport potassium, but with lower efficiency. It is nearly impermeable to the larger rubidium and cesium ions. Isoform 3 can also transport calcium ions. Mediates glutamate-independent Ca(2+) entry into neurons upon acidosis. This Ca(2+) overloading is toxic for cortical neurons and may be in part responsible for ischemic brain injury. Heteromeric channel assembly seems to modulate channel properties. Functions as a postsynaptic proton receptor that influences intracellular Ca(2+) concentration and calmodulin-dependent protein kinase II phosphorylation and thereby the density of dendritic spines. Modulates activity in the circuits underlying innate fear. {ECO:0000269 PubMed:22760635},, FUNCTION: Isoform 1 does not display proton-gated cation channel activity. {ECO:0000269 PubMed:22760635}.</p>
Molecular Weight:	59.9 kDa
UniProt:	P78348

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 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</p>

Application Details

	needed is the DNA that codes for the desired protein!
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