

Datasheet for ABIN3120109

Apelin Receptor Protein (APLNR) (AA 1-377) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Apelin Receptor (APLNR)
Protein Characteristics:	AA 1-377
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Apelin Receptor protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MEDDGYNYYG ADNQSECDYA DWKPSGALIP AIYMLVFLG TTNGLVLWT VFRTSREKRR</p> <p>SADIFIASLA VADLTFVVTI PLWATYTYRE FDWPFGTFC KLSSYLIFVN MYASVFCLTG</p> <p>LSFDRLAIV RPYANARLRL RVSGAVATAV LWVLAALLAV PVMVFRSTDA SENGTKIQCY</p> <p>MDYSMVATSN SEWAVEVGLG VSSTAVGFVV PFTIMLTCTYF FIAQTIAGHF RKERIEGLRK</p> <p>RRRLLSIIVV LVVTFALCWM PYHLVKTLYM LGSLLHWPCD FDIFLMNVFP YCTCISYVNS</p> <p>CLNPFLYAFF DPRFRQACTS MLCCDQSGCK GTPHSSSAEK SASYSSGHSQ GPQPNMGKGG</p> <p>EQMHEKSIPY SQETLVD</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 have a special request, please contact us.</p>
Characteristics:	Key Benefits:

Product Details

- 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:	Apelin Receptor (APLNR)
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Target Details

Alternative Name:	Aplnr (APLNR Products)
Background:	<p>Apelin receptor (Angiotensin receptor-like 1) (G-protein coupled receptor APJ) (MSR),FUNCTION: Receptor for apelin receptor early endogenous ligand (APELA) and apelin (APLN) hormones coupled to G proteins that inhibit adenylate cyclase activity. Plays a key role in early development such as gastrulation, blood vessels formation and heart morphogenesis by acting as a receptor for APELA hormone (PubMed:28854362, PubMed:28890073, PubMed:28663440). May promote angioblast migration toward the embryonic midline, i.e. the position of the future vessel formation, during vasculogenesis (By similarity). Promotes sinus venosus (SV)-derived endothelial cells migration into the developing heart to promote coronary blood vessel development (PubMed:28890073). Also plays a role in various processes in adults such as regulation of blood vessel formation, blood pressure, heart contractility and heart failure (PubMed:28371822). {ECO:0000250 UniProtKB:P79960, ECO:0000250 UniProtKB:Q7SZP9, ECO:0000269 PubMed:28371822, ECO:0000269 PubMed:28663440, ECO:0000269 PubMed:28854362, ECO:0000269 PubMed:28890073}.</p>
Molecular Weight:	42.3 kDa
UniProt:	Q9WV08

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 needed is the DNA that codes for the desired protein!</p>
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