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NIPAL4 Protein (AA 1-117) (His tag)





Go to Product page

Overview

1 mg
NIPAL4
AA 1-117
Human
Insect Cells
Recombinant
This NIPAL4 protein is labelled with His tag.
Crystallization (Crys), ELISA, SDS-PAGE (SDS), Western Blotting (WB)
MPGDSSPGTL PLWDASLSPP LGPDPGGFSR ASHAGDKSRP PAPELGSPGA VRPRVGSCAP
GPMELRVSNT SCENGSLLHL YCSSQEVLCQ IVNDLSPEVP SNATFHSWQE RIRQNYG
Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
special request, please contact us.
 Made in Germany - from design to production - by highly experienced protein experts. Human NIPAL4 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. 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 will ensure that you receive a correctly folded 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its

specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Grade:

Crystallography grade

Target Details

Target:	NIPAL4
Alternative Name:	NIPAL4 (NIPAL4 Products)
Background:	Acts as a Mg(2+) transporter. Can also transport other divalent cations such as Ba(2+), Mn(2+), Sr(2+) and Co(2+) but to a much less extent than Mg(2+) (By similarity). May be a receptor for ligands (trioxilins A3 and B3) from the hepoxilin pathway. {ECO:0000250, ECO:0000269 PubMed:15317751}.
Molecular Weight:	13.3 kDa Including tag.

Target Details

UniProt:	Q0D2K0	

For Research Use only

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:	In cases in which it is highly likely that the recombinant protein with the default tag will be
	insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to
	increase solubility. We will discuss all possible options with you in detail to assure that you
	receive your protein of interest.

Handling

Restrictions:

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

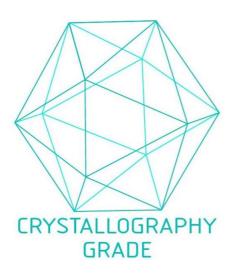


Image 1. "Crystallography Grade" protein due to multi-step, protein-specific purification process