

Datasheet for ABIN3135991

**Nischarin Protein (NISCH) (AA 1-1593) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	Nischarin (NISCH)
Protein Characteristics:	AA 1-1593
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Nischarin protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

## Product Details

Sequence:	MAAATLSFGP EREAPEAKEA RVVGSELVDT YTVYVIQVTD GNHEWTIKHR YSDFHDLHEK LVAERKIDKS LLPPKKIIGK NSRSLVEKRE RDLEVYLQTL LTTFPDVAPR VLAHFLHFHL YEVNGVTAAL AEELFEKGEQ LLGAGEVFAI RPLQLYAITE QLQQGKPTCA SGDAKTDLGH ILDFTCRLKY LKVGSGTEGPF GTSNIKEQLL PFDLSIFKSL HQVEISHCDA KHIRGLVTSK PTLATMSVRF SATSMKEVLA PEASEFDEWE PEGTATLGGP VTAIPTWQA LTTLDLSHNS ICEIDESVKL IPKIEYLDLS HNGLRVVDNL QHLYNLVHLD LSYNKLSSLE GVHTKLGNVK TLNLAGNFLE SLSGLHKLYS LVNVDLRDNR IEQLDEVKSI GSLPCLERLT LLNNPLSIIP DYRTKVLSQF GERASEICLD DVATTEKELD TVEVLKAIQK AKDVSKSLSN TEKKAGEDFR LPPAPCIRPG GSPPAAPASA SLPQPILSNQ GIMFVQEEAL ASSLSSTD SLPPEDHRPIAR ACSDSLESIP AGQVASDDL R DVP GAVGGVS PDHAEPEVQV VPGSGQIIFL PFTCIGYTAT NQDFIQRLST LIRQAIRQL PAWIEAANQR EEAHGEQGEE EEEEEEEEDV AENRYFEMGP PDAEEEEGSG QGEDEEDED EEAEEERLAL EWALGADEDF LLEHIRILKV LWCFLIHVQG
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SIRQFAACLVL TDFGIATFE IPHQESRGSS QHILSSLRV FCFPHGDLTE FGFLMPELCL  
VLKVRHSENT LFIISDAANL HEFHADLRSC FAPQHMAMLC SPILYGSHTT LQEFRLQLLT  
FYKVAGGSQE RSQGCFFVYL VYSDKRMVQT PAGDYSGNIE WASCTLCSAV RRSCCAPSEA  
VKSAAIPYWL LLTSQHLNVI KADFNPMPCR GTHNCRNRNS FKLSRVPLST VLLDPTRSCT  
QPRGAFADGH VLELLVGYRF VTAIFVLPHE KFHFLRVYNQ LRASLQDLKT VVISKNPSAK  
PRNQPAKSRA SAEQRLQETP ADAPAPAAVP PTASAPAPAE ALAPDLAPVQ APGEDRGLTS  
AEAPAAAEAP AAAEAPAAAE APAAAEAPAA AEAPAAAEAP APAEAPAAAE APAAAEAPAA  
AEAPAAAEAP ASAEAPAPNQ APAPARGPAP ARGAPAGGP APAEALAEV VPAQYPSERL  
IQSTSEENQI PSHLPVCPSL QHARLRGRA IIDLFHNSIA EVENEELRHL LWSSVVFYQT  
PGLEVTACVL LSSKAVYFIL HDGLRRYFSE PLQDFWHQKN TDYNNSPFHV SQCFVLKLSL  
LQSVNVGLFD QYFRLTGSSP TQVVTCLTRD SYLTHCFLQH LMLVLSSLER TPSPEPVDKD  
FYSEFGDKNT GKMEYELIH SSRVKFTYPS EEEVGDLYI VAQKMADPAK NPALSILLYI  
QAFQVVTPLH GRGRGPLRPK TLLLTSAEIF LLEDYIHYV LPEFAKEPPQ RDRYRLDDGR  
RVRDLDRVLM GYYPYPQALT LVFDDTQGHG LMGSVTLDFH GEMPGGPGRV GQGREVQWQV  
FVPSAESREK LISLLARQWE ALCGRELPVE LTG

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Nisch 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 receipt 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

## Product Details

specific reference buffer.

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: <ol style="list-style-type: none"><li>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.</li><li>2. 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.</li></ol>
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:	Nischarin (NISCH)
Alternative Name:	Nisch ( <a href="#">NISCH Products</a> )
Background:	Acts either as the functional imidazoline-1 receptor (I1R) candidate or as a membrane-associated mediator of the I1R signaling. Binds numerous imidazoline ligands that induces initiation of cell-signaling cascades triggering to cell survival, growth and migration. Its activation by the agonist rilmenidine induces an increase in phosphorylation of mitogen-activated protein kinases MAPK1 and MAPK3 in rostral ventrolateral medulla (RVLM) neurons that exhibited rilmenidine-evoked hypotension (By similarity). Blocking its activation with efaroxan abolished rilmenidine-induced mitogen-activated protein kinase phosphorylation in RVLM neurons (By similarity). Acts as a modulator of Rac-regulated signal transduction pathways. Suppresses Rac1-stimulated cell migration by interacting with PAK1 and inhibiting its kinase activity. Also blocks Pak-independent Rac signaling by interacting with RAC1 and inhibiting Rac1-stimulated NF-kB response element and cyclin D1 promoter activation. Inhibits also LIMK1 kinase activity by reducing LIMK1 'Tyr-508' phosphorylation. Inhibits Rac-induced cell migration and invasion in breast and colon epithelial cells. Inhibits lamellipodia formation, when overexpressed. Plays a role in protection against apoptosis (By similarity). Involved in association with IRS4 in the enhancement of insulin activation of MAPK1 and MAPK3 (By

## Target Details

similarity). When overexpressed, induces a redistribution of cell surface ITGA5 integrin to intracellular endosomal structures (By similarity). {ECO:0000250, ECO:0000269|PubMed:11121431, ECO:0000269|PubMed:12915132, ECO:0000269|PubMed:15229651, ECO:0000269|PubMed:16002401, ECO:0000269|PubMed:16678176, ECO:0000269|PubMed:18332102}.

Molecular Weight: 176.0 kDa Including tag.

UniProt: [Q80TM9](#)

## 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: Protein has not been tested for activity yet. 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.

Restrictions: For Research Use only

## Handling

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)



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process