

Datasheet for ABIN3094141

## Neurofibromin 1 Protein (NF1) (AA 2-1305) (His tag)



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### Overview

Quantity:	1 mg
Target:	Neurofibromin 1 (NF1)
Protein Characteristics:	AA 2-1305
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Neurofibromin 1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

### Product Details

Sequence:	AAHRPVEWVQ AVVSRFDEQL PIKTGQQNTH TKVSTEHNKE CLINISKYKF SLVISGLTTI LKNVNNMRIF GEAAEKNLYL SQLIILDTLE KCLAGQPKDT MRLDETMVLK QLLPEICHFL HTCREGNQHA AELRNSASGV LFSLSCNNFN AVFSRISTR L QELTVCS EDN VDVHDIELLQ YINVDCAKLK RLLKETAFKF KALKKVAQLA VINSLEKAFW NWVENYPDEF TKLYQIPQTD MAECAEKLFD LVDGFAESTK RKA AVWPLQI ILLILCPEII QDISKDVVDE NNMNKKLFLD SLRKALAGHG GSRQLTESAA IACVKLCKAS TYINWEDNSV IFLLVQSMVV DLKNLLFNPS KPFSGSQPA DVDLMIDCLV SCFRISPHNN QHFKICLAQN SPSTFHYVLV NSLHRIITNS ALDWWPKIDA VYCHSVELRN MFGETLHKAV QGCGAHPAIR MAPSLTFKEK VTSLKFKKEKP TDLETRSYKY LLLSMVKLIH ADPKLLLCNP RKQGPETQGS TAEITGLVQ LVPQSHMPEI AQEAMEALLV LHQLDSIDLW NPDAPVETFW EISSQMLFYI CKKLTSHQML SSTEILKWLR EILICRNKFL LKNKQADRSS CHFLLFYGVG CDIPSSGNTS QMSMDHEELL RTPGASLRKG KGNSSMDSAA GCSGTPPICR QAQTKLEVAL YMFLWNPDE AVLVAMSCFR HLC EEADIRC
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GVDEVSVHNL LPNYNTFMEF ASVSNMMSTG RAALQKRVMA LLRRIEHPTA GNTEAWEDTH  
AKWEQATKLI LNYPKAKMED GQAAESLHKT IVKRRMSHVS GGGSIDLSDT DSLQEWINMT  
GFLCALGGVC LQQRSNSGLA TYSPPMGPVS ERKGSMSVM SSEGNADTPV SKFMDRLLSL  
MVCNHEKVGL QIRTNVKDLV GLELSPALYP MLFNKLKNTI SKFFDSQGQV LLTDTNTQFV  
EQTIAIMKNL LDNHTEGSSE HLGQASITM MLNLVRYVRV LGNMVHAIQI KTKLCQLVEV  
MMARRDDLSE CQEMKFRNKM VEYLTDWVMG TSNQAADDDV KCLTRDLQA SMEAVVSLLA  
GLPLQPEEGD GVLEMEAKSQ LFLKYFTLFM NLLNDCSEVE DESAQTGGKR RGMSRRLASL  
RHCTVLAMSN LLNANVDSGL MHSIGLGYHK DLQTRATFME VLTILQQT EFDTLAETVL  
ADRFERLVEL VTMMGDQGEL PIAMALANVV PCSQWDELAR VLVTLFDSRH LLYQLLWNMF  
SKEVELADSM QTLFRGNSLA SKIMTFCFKV YGATYLQKLL DPLL

**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.
- Human NF1 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 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.

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### 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

## Product Details

different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.

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.

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: Neurofibromin 1 (NF1)

Alternative Name: NF1 ([NF1 Products](#))

Background: Stimulates the GTPase activity of Ras. NF1 shows greater affinity for Ras GAP, but lower specific activity. May be a regulator of Ras activity. {ECO:0000269|PubMed:2121371, ECO:0000269|PubMed:8417346}.

Molecular Weight: 147.6 kDa Including tag.

UniProt: [P21359](#)

Pathways: [cAMP Metabolic Process](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

## 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.

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)