Datasheet for ABIN7550410

NUPR1 Protein (AA 1-82) (Fc Tag)

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Overview

Quantity:	1 mg
Target:	NUPR1
Protein Characteristics:	AA 1-82
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NUPR1 protein is labelled with Fc Tag.

Product Details

Purpose:	Custom-made recombinant NUPR1 Protein expressed in mammalian cells.
Sequence:	MATFPPATSA PQQPPGPEDE DSSLDESDLY SLAHSYLGGG GRKGRTKREA AANTNRPSPG GHERKLVTKL QNSERKKRGA RR **Sequence without tag. The proposed Purification-Tag is based on experiences 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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis).

Product Details

	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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	NUPR1
Alternative Name:	NUPR1 (NUPR1 Products)
Background:	Nuclear protein 1 (Candidate of metastasis 1) (Protein p8),FUNCTION: Transcription regulator that converts stress signals into a program of gene expression that empowers cells with resistance to the stress induced by a change in their microenvironment. Thereby participates in regulation of many process namely cell-cycle, apoptosis, autophagy and DNA repair responses (PubMed:16478804, PubMed:19650074, PubMed:16300740, PubMed:19723804, PubMed:11056169, PubMed:22858377, PubMed:11940591, PubMed:18690848, PubMed:22565310, PubMed:20181828, PubMed:30451898). Controls cell cycle progression and protects cells from genotoxic stress induced by doxorubicin through the complex formation with TP53 and EP300 that binds CDKN1A promoter leading to transcriptional induction of CDKN1A (PubMed:18690848). Protects pancreatic cancer cells from stress-induced cell death by binding the RELB promoter and activating its transcription, leading to IER3 transactivation (PubMed:22565310). Negatively regulates apoptosis through interaction with PTMA (PubMed:16478804). Inhibits autophagy-induced apoptosis in cardiac cells through FOXO3 interaction, inducing cytoplasmic translocation of FOXO3 thereby preventing the FOXO3 association with the pro-autophagic BNIP3 promoter (PubMed:20181828). Inhibits cell growth and facilitates programmed cell death by apoptosis after adriamycin-induced DNA damage through transactivation of TP53 (By similarity). Regulates methamphetamine-induced apoptosis and autophagy through DDIT3-mediated endoplasmic reticulum stress pathway (By similarity). Participates in DNA repair following gamma-irradiation by facilitating DNA access of

Target Details

	the transcription machinery through interaction with MSL1 leading to inhibition of histone H4' Lys-16' acetylation (H4K16ac) (PubMed:19650074). Coactivator of PAX2 transcription factor activity, both by recruiting EP300 to increase PAX2 transcription factor activity and by binding PAXIP1 to suppress PAXIP1-induced inhibition on PAX2 (PubMed:11940591). Positively regulates cell cycle progression through interaction with COPS5 inducing cytoplasmic translocation of CDKN1B leading to the CDKN1B degradation (PubMed:16300740). Coordinates, through its interaction with EP300, the assiociation of MYOD1, EP300 and DDX5 to the MYOG promoter, leading to inhibition of cell-cycle progression and myogenic differentiation promotion (PubMed:19723804). Negatively regulates beta cell proliferation via inhibition of cell-cycle regulatory genes expression through the suppression of their promoter activities (By similarity). Also required for LHB expression and ovarian maturation (By similarity). Exacerbates CNS inflammation and demyelination upon cuprizone treatment (By similarity). {ECO:0000250|UniProtKB:O54842, ECO:0000250|UniProtKB:Q9WTK0, ECO:0000269|PubMed:11056169, ECO:0000269|PubMed:11940591, ECO:0000269|PubMed:16300740, ECO:0000269|PubMed:16478804, ECO:0000269|PubMed:18690848, ECO:0000269|PubMed:19650074, ECO:0000269|PubMed:19723804, ECO:0000269|PubMed:20181828, ECO:0000269|PubMed:22565310, ECO:0000269|PubMed:22858377, ECO:0000269|PubMed:30451898}.
Molecular Weight:	8.9 kDa
UniProt:	O60356

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months