

# Datasheet for ABIN3134115 **NEDD4 Protein (AA 1-887) (Strep Tag)**



Go to Product page

_				
	۱۱ / ۱	rv		۱۸/
	' V '	 ı v	Ι.	v v

Quantity:	250 μg
Target:	NEDD4
Protein Characteristics:	AA 1-887
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEDD4 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)			
Product Details				
Brand:	AliCE®			
Sequence:	MSSDMAADES EAPVLSEDEV WEFCLDKTED GGGSPGSDVT DTCEPPCGCW ELNPNSLEEE			
	HVLFTADPYL ELHNDDTRVV RVKVIAGIGL AKKDILGASD PYVRVTLYDP MSGILTSVQT			
	KTIKKSLNPK WNEEILFRVL PQRHRILFEV FDENRLTRDD FLGQVDVPLY PLPTENPRME			
	RPYTFKDFVL HPRSHKSRVK GYLRLKMTYL PKNGSEDENA DQAEELEPGW VVLDQPDAAT			
	HLPHPPEPSP LPPGWEERQD VLGRTYYVNH ESRRTQWKRP SPDDDLTDED NDDMQLQAQR			
	AFTTRRQISE DVDGPDNRES PENWEIVRED ENTEYSGQAV QSPPSGHIDV QTHLAEEFNT			
	RLAVCGNPAT SQPVTSSNHS SRGGSLQTCI FEEQPTLPVL LPTSSGLPPG WEEKQDDRGR			
	SYYVDHNSKT TTWSKPTMQD DPRSKIPAHL RGKTDSNDLG PLPPGWEERT HTDGRVFFIN			
	HNIKKTQWED PRLQNVAITG PAVPYSRDYK RKYEFFRRKL KKQTDIPNKF EMKLRRANIL			
	EDSYRRIMGV KRADLLKARL WIEFDGEKGL DYGGVAREWF FLISKEMFNP YYGLFEYSAT			
	DNYTLQINPN SGLCNEDHLS YFKFIGRVAG MAVYHGKLLD GFFIRPFYKM MLQKLITLHD			

MESVDSEYYS SLRWILENDP TELDLRFIID EELFGQTHQH ELKTGGSEIV VTNKNKKEYI
YLVIQWRFVN RIQKQMAAFK EGFFELIPQD LIKIFDENEL ELLMCGLGDV DVNDWREHTK
YKNGYSMNHQ VIHWFWKAVW MMDSEKRIRL LQFVTGTSRV PMNGFAELYG SNGPQSFTVE
QWGTPDKLPR AHTCFNRLDL PPYESFDELW DKLQMAIENT QGFDGVD

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.

#### Characteristics:

#### Key Benefits:

- · 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 posttranslational 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.

### **Product Details**

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

Grade:	custom-made
Target Details	
Target:	NEDD4
Alternative Name:	Nedd4 (NEDD4 Products)
Background:	E3 ubiquitin-protein ligase NEDD4 (EC 2.3.2.26) (HECT-type E3 ubiquitin transferase NEDD4) (Neural precursor cell expressed developmentally down-regulated protein 4) (NEDD-4),FUNCTION: E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Specifically ubiquitinates 'Lys-63' in target proteins (By similarity). Monoubiquitinates IGF1R at multiple sites, thus leading to receptor internalization and degradation in lysosomes (PubMed:18286479). Ubiquitinates FGFR1, leading to receptor internalization and degradation in lysosomes. Involved in ubiquitination of ERBB4 intracellular domain E4ICD1 (PubMed:19193720). Predominantly involved in ubiquitination of membrane bound forms of ERBB4 rather than processed precursors and intermediate membrane-anchored 80 kDa fragments (m80HER4), with a lesser role in ubiquitination of ERBB4 intracellular domain E4ICD1 (PubMed:19047365). Promotes ubiquitination of RAPGEF2. Involved in the pathway leading to the degradation of VEGFR-2/KDFR, independently of its ubiquitin-ligase activity. Part of a signaling complex composed of NEDD4, RAP2A and TNIK which regulates neuronal dendrite extension and arborization during development (PubMed:20159449). Ubiquitinates TNK2 and regulates EGF-induced degradation of EGFR and TNF2 (By similarity). Ubiquitinates BRAT1 and this ubiquitination is enhanced in the presence of NDFIP1 (By similarity). Ubiquitinates DAZAP2, leading to its proteasomal degradation (By similarity). Ubiquitinates POLR2A (By similarity). Functions as a platform to recruit USP13 to
	form an NEDD4-USP13 deubiquitination complex that plays a critical role in cleaving the 'Lys-48'-linked ubiquitin chains of VPS34 and then stabilizing VPS34, thus promoting the formation
	of autophagosomes (By similarity). {ECO:0000250 UniProtKB:P46934, ECO:0000269 PubMed:18286479, ECO:0000269 PubMed:19047365, ECO:0000269 PubMed:19193720}.
Molecular Weight:	102.7 kDa

Molecular Weight:

102.7 kDa

## **Target Details**

rarget Details	
UniProt:	P46935
Pathways:	Notch Signaling, Intracellular Steroid Hormone Receptor Signaling Pathway, Skeletal Muscle
	Fiber Development, Signaling Events mediated by VEGFR1 and VEGFR2
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:	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!
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