

Datasheet for ABIN3094006

NEUROD1 Protein (AA 1-356) (Strep Tag)



Overview

Quantity:	250 μg
Target:	NEUROD1
Protein Characteristics:	AA 1-356
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEUROD1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Brand:	AliCE®
Sequence:	MTKSYSESGL MGEPQPQGPP SWTDECLSSQ DEEHEADKKE DDLETMNAEE DSLRNGGEEE
	DEDEDLEEEE EEEEEDDDQK PKRRGPKKKK MTKARLERFK LRRMKANARE RNRMHGLNAA
	LDNLRKVVPC YSKTQKLSKI ETLRLAKNYI WALSEILRSG KSPDLVSFVQ TLCKGLSQPT
	TNLVAGCLQL NPRTFLPEQN QDMPPHLPTA SASFPVHPYS YQSPGLPSPP YGTMDSSHVF
	HVKPPPHAYS AALEPFFESP LTDCTSPSFD GPLSPPLSIN GNFSFKHEPS AEFEKNYAFT
	MHYPAATLAG AQSHGSIFSG TAAPRCEIPI DNIMSFDSHS HHERVMSAQL NAIFHD
	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.

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
Target Details	
Target:	NEUROD1

Target Details

Alternative Name:	NEUROD1 (NEUROD1 Products)
Background:	Neurogenic differentiation factor 1 (NeuroD) (NeuroD1) (Class A basic helix-loop-helix protein 3 (bHLHa3),FUNCTION: Acts as a transcriptional activator: mediates transcriptional activation by
	binding to E box-containing promoter consensus core sequences 5'-CANNTG-3'. Associates
	with the p300/CBP transcription coactivator complex to stimulate transcription of the secretin
	gene as well as the gene encoding the cyclin-dependent kinase inhibitor CDKN1A. Contributes
	to the regulation of several cell differentiation pathways, like those that promote the formation
	of early retinal ganglion cells, inner ear sensory neurons, granule cells forming either the
	cerebellum or the dentate gyrus cell layer of the hippocampus, endocrine islet cells of the
	pancreas and enteroendocrine cells of the small intestine. Together with PAX6 or SIX3, is
	required for the regulation of amacrine cell fate specification. Also required for dendrite
	morphogenesis and maintenance in the cerebellar cortex. Associates with chromatin to
	enhancer regulatory elements in genes encoding key transcriptional regulators of neurogenesis
	(By similarity). {ECO:0000250 UniProtKB:Q60867}.
Molecular Weight:	39.9 kDa
UniProt:	Q13562
Pathways:	Dopaminergic Neurogenesis, Hormone Transport, Carbohydrate Homeostasis
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