

Datasheet for ABIN3125513

## Sialidase 4 Protein (NEU4) (AA 1-478) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	Sialidase 4 (NEU4)
Protein Characteristics:	AA 1-478
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sialidase 4 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MGPTRVPRRT VLFQRERTGL TYRVPALLCV PPRPTLLAFA EQRLSPDDSH AHRLVLRRTG  LTRGSRVWGT LSVLETAVLE EHRSMNPCPV LDEHSGTIFL FFI AVLGH TP EAVQIATGKN  AARLCCVTSC DAGLTWGSVR DLTEEAIGAA LQDWATF AVG PGHGVQLRSG RLLVPAYTYH  VDRRECFGKI CWTSPHSLAF YSDDHGISWH CGGLVPNLRS GECQLAAVDG DFLYCNARSP  LGNRVQALSA DEGTSFLPGE LVPTLAETAR GCQGSIVGFL APPSIEPQDD RWTGSPRNTP  HSPCFNLRVQ ESSGEGARGL LERWMPRLPL CYPQSRSPEN HGLEPGSDGD KTSWTPECPM  SSDSMLQSPT WLLYSHPAGR RARLHMG IYL SRSPLDPHSW TEPWVIYEGP SGYSDLAFLG  PMPGASLVFA CLFESGTRTS YEDISFCLFS LADVLENVPT GLEMLSLRDK AQGHCWPS</p> <p><b>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.</b></p>

# Product Details

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Characteristics:	<div>Key Benefits:</div> <ul style="list-style-type: none"><li>• Made in Germany - from design to production - by highly experienced protein experts.</li><li>• Protein expressed with ALiCE® and purified in one-step affinity chromatography</li><li>• These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).</li><li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li></ul> <p>This protein is a <b>made-to-order protein</b> and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.</p> <p>The big advantage of ordering our <b>made-to-order proteins</b> 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.</p> <div>Expression System:</div> <ul style="list-style-type: none"><li>• ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</li><li>• 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!</li></ul> <div>Concentration:</div> <ul style="list-style-type: none"><li>• The concentration of our recombinant proteins is measured using the absorbance at 280nm.</li><li>• The protein's absorbance will be measured against its specific reference buffer.</li><li>• We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.</li></ul>
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:	Sialidase 4 (NEU4)
Alternative Name:	Neu4 ( <a href="#">NEU4 Products</a> )
Background:	<p>Sialidase-4 (EC 3.2.1.18) (N-acetyl-alpha-neuraminidase 4) (Neuraminidase 4),FUNCTION: Exo-alpha-sialidase that catalyzes the hydrolytic cleavage of the terminal sialic acid (N-acetylneuraminic acid, Neu5Ac) of a glycan moiety in the catabolism of glycolipids, glycoproteins and oligosaccharides. Efficiently hydrolyzes gangliosides including alpha-(2-&gt;3)-sialylated GD1a and GM3 and alpha-(2-&gt;8)-sialylated GD3 (PubMed:19506080, PubMed:22393058). Hydrolyzes poly-alpha-(2-&gt;8)-sialylated neural cell adhesion molecule NCAM1 likely at growth cones, suppressing neurite outgrowth in hippocampal neurons (PubMed:19506080, PubMed:22393058). May desialylate sialyl Lewis A and X antigens at the cell surface, down-regulating these glycan epitopes recognized by SELE/E selectin in the initiation of cell adhesion and extravasation (By similarity). Has sialidase activity toward mucin, fetuin and sialyllactose (PubMed:19506080, PubMed:22393058).</p> <p>{ECO:0000250 UniProtKB:Q8WWR8, ECO:0000269 PubMed:19506080, ECO:0000269 PubMed:22393058}.</p>
Molecular Weight:	52.4 kDa
UniProt:	<a href="#">Q8BZL1</a>

## 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:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
Restrictions:	For Research Use only

## Handling

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Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months