

Datasheet for ABIN3126831

Fukutin Protein (FKTN) (AA 1-461) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	Fukutin (FKTN)
Protein Characteristics:	AA 1-461
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Fukutin protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MSRINKNVVL ALLTLTSSAF LLFQLYYYYKH YLSARNGPGS SKSKGNRVGF DSTQWRAVKK FIMLTSSQNV PVFLIDPWIL ESINKNFEQV KNASQGPASE CRFFCVPRDF TAFALQYHLW KNEDGWFRIA ENMGFQCLKT ESKDPRLDGI DSLSGTEIPL HYVCKLTTHA IHLVVFHERS GNYLWHGHLR LKGHMDRKFV PFRKLQFGRY PGAFDRPELQ QVTVDGLDML IPKDPGRFLE EVPHSRFIEC RYKEARAFLQ QYIDDNTVDA MVFRKRAKEL LQLAAKTLKD LGVPFWLSSG TCLGWYRQCG IIPYSKDVDL GIFIQDYKPD IILAFQEAGL PLKHKFGKVE DSLELSFQGK NDVKLDIFFF YEEADHLWNG GTQARTGKKF KYLFPKFTLC WTEFVDIKVH VPCETVDYIE ANYGKTWKIP IKTWDWKSSP PNVQPNGIWP ISEWDEVIQL Y</p> <p>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.</p>

Product Details

Characteristics:	<div>Key Benefits:</div> <ul style="list-style-type: none">• 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). <div>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.</div> <div>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.</div> <div>Expression System:</div> <ul style="list-style-type: none">• 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.• 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! <div>Concentration:</div> <ul style="list-style-type: none">• 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:	Fukutin (FKTN)
Alternative Name:	Fktn (FKTN Products)
Background:	<p>Ribitol-5-phosphate transferase FKTN (EC 2.7.8.-) (Fukutin) (Fukuyama-type congenital muscular dystrophy protein) (Ribitol-5-phosphate transferase),FUNCTION: Catalyzes the transfer of CDP-ribitol to the distal N-acetylgalactosamine of the phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1) (PubMed:12471058). This constitutes the first step in the formation of the ribitol 5-phosphate tandem repeat which links the phosphorylated O-mannosyl trisaccharide to the ligand binding moiety composed of repeats of 3-xylosyl-alpha-1,3-glucuronic acid-beta-1 (By similarity). Required for normal location of POMGNT1 in Golgi membranes, and for normal POMGNT1 activity (PubMed:19017726). May interact with and reinforce a large complex encompassing the outside and inside of muscle membranes (PubMed:19017726, PubMed:22922256). Could be involved in brain development (Probable). {ECO:0000250 UniProtKB:O75072, ECO:0000269 PubMed:12471058, ECO:0000269 PubMed:19017726, ECO:0000269 PubMed:22922256, ECO:0000305 PubMed:12670716}.</p>
Molecular Weight:	53.6 kDa
UniProt:	Q8R507
Pathways:	Regulation of Carbohydrate Metabolic Process

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</p>

Application Details

	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