Go to Product page

Datasheet for ABIN3128527
ATIC Protein (AA 1-592) (Strep Tag)

Overview

Quantity:	250 μg
Target:	ATIC
Protein Characteristics:	AA 1-592
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ATIC protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MAPSQLALFS VSDKTGLVEF ARSLASLGLS LVASGGTAKA IRDAGLAVRD VSELTGFPEM LGGRVKTLHP AVHAGILARN IPEDAADMAR LDFNLVRVVV CNLYPFVKTV ASPDVTVEAA VEQIDIGGVT LLRAAAKNHA RVTVVCEPED YAGVAAEMHG SDSKDTSLET RRHLALKAFT HTAQYDEAIS DYFRKQYSKG ISQMPLRYGM NPHQTPAQLY TLKPKLPITV LNGAPGFINL CDALNAWQLV TELRGAVDIP AAASFKHVSP AGAAVGVPLS EDEARVCMVY DLYPTLTPLA VAYARARGAD RMSSFGDFVA LSDICDVPTA KIISREVSDG IVAPGYEEEA LKILSKKKNG NYCVLQMDQS YKPDENEVRT LFGLRLSQKR NNGVVDKSLF SNIVTKNKDL PESALRDLIV ATVAVKYTQS NSVCYAKDGQ VIGIGAGQQS RIHCTRLAGD KANSWWLRHH PRVLSMKFKA GVKRAEISNA IDQYVTGTIG EGEDLVKWEA LFEEVPELLT EAEKKEWVDK LSGVSVSSDA FFPFRDNVDR AKRSGVAYIV APSGSTADKV VIEACDELGI VLAHTDLRLF HH **Sequence without tag. The proposed Strep-Tag is based on experience s with the expression**

Product Details

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 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! 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:	ATIC
Alternative Name:	Atic (ATIC Products)
Background:	Bifunctional purine biosynthesis protein ATIC (AICAR transformylase/inosine monophosphate cyclohydrolase) (ATIC) [Includes: Phosphoribosylaminoimidazolecarboxamide formyltransferase (EC 2.1.2.3) (5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase) (AICAR formyltransferase) (AICAR transformylase), Inosine 5'-monophosphate cyclohydrolase (IMP cyclohydrolase) (EC 3.5.4.10) (IMP synthase) (Inosinicase)],FUNCTION: Bifunctional enzyme that catalyzes the last two steps of purine biosynthesis (PubMed:29072452). Acts as a transformylase that incorporates a formyl group to the AMP analog AICAR (5-amino-1-(5-phospho-beta-D-ribosyl)imidazole-4-carboxamide) to produce the intermediate formyl-AICAR (FAICAR) (PubMed:29072452). Also displays cyclohydrolase activity involving the cyclization of FAICAR to IMP. Can use both 10-formyldihydrofolate and 10-formyltetrahydrofolate as the formyl donor in this reaction. Also catalyzes the cyclization of FAICAR to IMP. Promotes insulin receptor/INSR autophosphorylation and is involved in INSR internalization (By similarity). {ECO:0000250|UniProtKB:P31939, ECO:0000269|PubMed:29072452}.
Molecular Weight:	64.2 kDa
UniProt:	Q9CWJ9

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!

Application Details

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