

Datasheet for ABIN3136150

THEMIS Protein (AA 1-636) (Strep Tag)



Overview

Quantity:	250 μg
Target:	THEMIS
Protein Characteristics:	AA 1-636
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This THEMIS protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MALSLEEFVY SLDLRTLPRV LEIQSGIYFE GSVYEMFGNE CCLSTGEVIK ITGLKIKKMM
	AEICEGAIGG CESQKPFELP MNFPGLFKVM ADKTPYLSIE EITRTVNIGP SRLGHPCFYH
	LKDIKLENLI IKQGEPIRFN SVEEINGETL VNCGVVRNHQ SHSFTLPLSQ EGEFYECEDE
	HIYTLKEIVE WKIPKNRTRT VKLTDFSNKW DSTNPFPEDF YGTLILKPVY EIQGVLKFQK
	DIVRILPSLD VEVKDITDSY DANWFLQLLS TDDLFEMTSK EFPVVAEVVE ISQGNHLPQS
	ILQREKTIVI HKKYQASRIL ASEIRSNFPK RHFLIPISYK GKFKRRPREF PTAYDLQIAK
	SRKETLHVVA TKAFHTLHKE LSPVSVGDQF LVHHSETTEV VFEGTRKVNV LTCEKVLNKT
	REDAQLPLYM EGGFVEVIHD KKQYQISELC TQFCWPFNVK VAVRDLSIKD DILAATPGLQ
	LEEDITDSYL LISDFANPEE CWEIPMSRLN MTVRLVNGSS LPADAGLLQV RSFVEEITEE
	QYYMMRRYES SLSHPPPRPP KHPSAEEMKL TLLSLAEERT INLPKSLKSH HVDRPKKLPS
	DESGQDSRAP VGFQNDVADV ERQKSKHGPL QPQAPL

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).

Product Details Grade: custom-made **Target Details** Target: **THEMIS** Alternative Name Themis (THEMIS Products) Background: Protein THEMIS (Grb2-associating protein) (Gasp) (Protein thylex) (Thymocyte-expressed molecule involved in selection), FUNCTION: Plays a central role in late thymocyte development by controlling both positive and negative T-cell selection. Required to sustain and/or integrate signals required for proper lineage commitment and maturation of T-cells. Regulates T-cell development through T-cell antigen receptor (TCR) signaling and in particular through the regulation of calcium influx and phosphorylation of Erk. {ECO:0000269|PubMed:19597497, ECO:0000269|PubMed:19597498, ECO:0000269|PubMed:19597499, ECO:0000269|PubMed:19620281, ECO:0000269|PubMed:19805304}. Molecular Weight: 72.8 kDa UniProt: Q8BGW0 **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