

Datasheet for ABIN3096345

## VPS33A Protein (AA 1-596) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	VPS33A
Protein Characteristics:	AA 1-596
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This VPS33A protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Brand:	AliCE®
Sequence:	<p>MAAHLASYGRV NLNVLREAVR RELREFLDKC AGSKAIWDE YLTGPFGLIA QYSLLKEHEV  EKMFTLKGNR LPAADVKNII FFVRPRLELM DIIAENVLSE DRRGPTRDFH ILFVPRRSLL  CEQRLKDLGV LGSFIHREEY SLDLIPFDGD LLSMESEGA FKECYLEGDQT SLYHAAKGLM  TLQALYGTIP QIFGKGECAR QVANMMIRMK REFTGSQNSI FPFVDNLLLL DRNVDLLTPL  ATQLTYEGLI DEIYGIQNSY VKLPPEKFAP KKQGDGGKDL PTEAKKLQLN SAEELYAEIR  DKNFNAVGSV LSKKAKIISA AFEERHNAKT VGEIKQFVSQ LPHMQAARGS LANHTSIAEL  IKDVTTSSEDF FDKLTVEQEF MSGIDTDKVN NYIEDCIAQK HSLIKVLRV CLQSVCSNGL  KQKVLDDYYKR EILQTYGYEH ILTLHNLEKA GLLKPQTGGR NNYPTIRKTL RLWMDDVNEQ  NPTDISYVYS GYAPLSVRLA QLLSRPGWRS IEEVLRILPG PHFEERQPLP TGLQKKRQPG  ENRVTLIFFL GGVTFAEIAA LRFLSQLEDG GTEYVIATTK LMNGTSWIEA LMEKPF</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.**

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### 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.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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### Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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### Grade:

custom-made

## Target Details

Target:	VPS33A
Alternative Name:	VPS33A ( <a href="#">VPS33A Products</a> )
Background:	<p>Vacuolar protein sorting-associated protein 33A (hVPS33A),FUNCTION: Plays a role in vesicle-mediated protein trafficking to lysosomal compartments including the endocytic membrane transport and autophagic pathways. Believed to act as a core component of the putative HOPS and CORVET endosomal tethering complexes which are proposed to be involved in the Rab5-to-Rab7 endosome conversion probably implicating MON1A/B, and via binding SNAREs and SNARE complexes to mediate tethering and docking events during SNARE-mediated membrane fusion. The HOPS complex is proposed to be recruited to Rab7 on the late endosomal membrane and to regulate late endocytic, phagocytic and autophagic traffic towards lysosomes. The CORVET complex is proposed to function as a Rab5 effector to mediate early endosome fusion probably in specific endosome subpopulations (PubMed:23351085, PubMed:24554770, PubMed:25266290, PubMed:25783203). Required for fusion of endosomes and autophagosomes with lysosomes, the function is dependent on its association with VPS16 but not VIPAS39 (PubMed:25783203). The function in autophagosome-lysosome fusion implicates STX17 but not UVRAG (PubMed:24554770).</p> <p>{ECO:0000269 PubMed:24554770, ECO:0000269 PubMed:25783203, ECO:0000305 PubMed:23351085, ECO:0000305 PubMed:25266290, ECO:0000305 PubMed:25783203}.</p>
Molecular Weight:	67.6 kDa
UniProt:	<a href="#">Q96AX1</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</p>

Application Details

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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 <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