

### Datasheet for ABIN3103005

# Mucolipin 2 (MCOLN2) (AA 1-566) protein (Strep Tag)



#### Overview

Quantity:	250 μg
Target:	Mucolipin 2 (MCOLN2)
Protein Characteristics:	AA 1-566
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MARQPYRFPQ ARIPERGSGV FRLTVRNAMA HRDSEMKEEC LREDLKFYFM SPCEKYRARR
	QIPWKLGLQI LKIVMVTTQL VRFGLSNQLV VAFKEDNTVA FKHLFLKGYS GTDEDDYSCS
	VYTQEDAYES IFFAINQYHQ LKDITLGTLG YGENEDNRIG LKVCKQHYKK GTMFPSNETL
	NIDNDVELDC VQLDLQDLSK KPPDWKNSSF FRLEFYRLLQ VEISFHLKGI DLQTIHSREL
	PDCYVFQNTI IFDNKAHSGK IKIYFDSDAK IEECKDLNIF GSTQKNAQYV LVFDAFVIVI
	CLASLILCTR SIVLALRLRK RFLNFFLEKY KRPVCDTDQW EFINGWYVLV IISDLMTIIG
	SILKMEIKAK NLTNYDLCSI FLGTSTLLVW VGVIRYLGYF QAYNVLILTM QASLPKVLRF
	CACAGMIYLG YTFCGWIVLG PYHDKFENLN TVAECLFSLV NGDDMFATFA QIQQKSILVW
	LFSRLYLYSF ISLFIYMILS LFIALITDSY DTIKKFQQNG FPETDLQEFL KECSSKEEYQ KESSAFLSC
	CCRRRKRSDD HLIPIS
	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).
Grade:	custom-made

# **Target Details**

Target:	Mucolipin 2 (MCOLN2)
Alternative Name:	MCOLN2 (MCOLN2 Products)
Background:	Mucolipin-2 (Transient receptor potential channel mucolipin 2) (TRPML2),FUNCTION:
	Nonselective cation channel probably playing a role in the regulation of membrane trafficking
	events. Acts as a Ca(2+)-permeable cation channel with inwardly rectifying activity
	(PubMed:19940139, PubMed:19885840). May activate ARF6 and be involved in the trafficking
	of GPI-anchored cargo proteins to the cell surface via the ARF6-regulated recycling pathway
	(PubMed:17662026). May play a role in immune processes. In adaptive immunity, TRPML2 and
	TRPML1 may play redundant roles in the function of the specialized lysosomes of B cells (By
	similarity). In the innate immune response, may play a role in the regulation of chemokine
	secretion and macrophage migration (By similarity). Through a possible and probably tissue-
	specific heteromerization with MCOLN1 may be at least in part involved in many lysosome-
	dependent cellular events (PubMed:19885840). {ECO:0000250 UniProtKB:Q8K595,
	ECO:0000269 PubMed:17662026, ECO:0000269 PubMed:19885840,
	ECO:0000269 PubMed:19940139, ECO:0000305}.
Molecular Weight:	65.9 kDa
UniProt:	Q8IZK6
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 <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