

# Datasheet for ABIN3146983

# CATSPER2 Protein (AA 1-106) (His tag)



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Quantity:	2 mg
Target:	CATSPER2
Protein Characteristics:	AA 1-106
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CATSPER2 protein is labelled with His tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB), Crystallization (Crys)
Product Details	
Sequence:	MAQEQGHFQL LRADAIRSKL IDTFSLIEHL QGLSQAVPRH TLREILDPSY QQKLMSGDQE
	QLVRFSIKPR RMGHITHSRR LLSRLRVRCS RMPPLSLWAG WVLDSS
	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
	special request, please contact us.
Characteristics:	<ul> <li>Made in Germany - from design to production - by highly experienced protein experts.</li> <li>Mouse Catsper2 Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded 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.

specific reference buffer.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

#### Purification:

Two step purification of proteins expressed in bacterial culture:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

#### Sterility:

0.22 µm filtered

## Endotoxin Level:

Endotoxin has not been removed. Please contact us if you require endotoxin removal.

Grade:

Crystallography grade

## Target Details

Target:	CATSPER2	
Alternative Name:	Catsper2 (CATSPER2 Products)	
Background:	Voltage-gated calcium channel that plays a central role in sperm cell hyperactivation. Controls	
	calcium entry to mediate the hyperactivated motility, a step needed for sperm motility which is	
	essential late in the preparation of sperm for fertilization. Activated by intracellular	
	alkalinization. {ECO:0000269 PubMed:14657366, ECO:0000269 PubMed:16036917,	
	ECO:0000269 PubMed:17174296}.	

# **Target Details**

Molecular Weight:	13.3 kDa Including tag.	
UniProt:	A2ARP9	
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 gurantee	
	though.	
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the	
	recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible	
	options with you in detail to assure that you receive your protein of interest.	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	
Expiry Date:	Unlimited (if stored properly)	