

# Datasheet for ABIN7554298 KCNE2 Protein (AA 1-123) (His tag)



#### Overview

Quantity:	1 mg
Target:	KCNE2
Protein Characteristics:	AA 1-123
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCNE2 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant KCNE2 Protein expressed in mammalian cells.
Sequence:	MSTLSNFTQT LEDVFRRIFI TYMDNWRQNT TAEQEALQAK VDAENFYYVI LYLMVMIGMF
	SFIIVAILVS TVKSKRREHS NDPYHQYIVE DWQEKYKSQI LNLEESKATI HENIGAAGFK MSP
	Sequence without tag. The proposed Purification-Tag is based on experiences 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	Protein expressed in mammalian cells and purified in one-step affinity chromatography
	The optimized expression system ensures reliability for intracellular, secreted and
	transmembrane proteins.

• 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

### **Target Details**

Target: KCNE2

Alternative Name: KCNE2 (KCNE2 Products)

Background:

Potassium voltage-gated channel subfamily E member 2 (MinK-related peptide 1) (Minimum potassium ion channel-related peptide 1) (Potassium channel subunit beta MiRP1),FUNCTION: Ancillary protein that assembles as a beta subunit with a voltage-gated potassium channel complex of pore-forming alpha subunits. Modulates the gating kinetics and enhances stability of the channel complex. Assembled with KCNB1 modulates the gating characteristics of the delayed rectifier voltage-dependent potassium channel KCNB1. Associated with KCNH2/HERG is proposed to form the rapidly activating component of the delayed rectifying potassium current in heart (IKr). May associate with KCNQ2 and/or KCNQ3 and modulate the native Mtype current. May associate with HCN1 and HCN2 and increase potassium current. Interacts with KCNQ1, forms a heterooligomer complex leading to currents with an apparently instantaneous activation, a rapid deactivation process and a linear current-voltage relationship and decreases the amplitude of the outward current (PubMed:11101505). KCNQ1-KCNE2 channel associates with Na(+)-coupled myo-inositol symporter in the apical membrane of choroid plexus epithelium and regulates the myo-inositol gradient between blood and cerebrospinal fluid with an impact on neuron excitability. {ECO:0000250|UniProtKB:P63161, ECO:0000250|UniProtKB:Q9D808, ECO:0000269|PubMed:10219239, ECO:0000269|PubMed:11101505}.

## **Target Details**

Molecular Weight:	14.5 kDa
UniProt:	Q9Y6J6

## **Application Details**

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months