Datasheet for ABIN7551770

ACER2 Protein (AA 1-275) (His tag)

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Overview

Quantity:	1 mg
Target:	ACER2
Protein Characteristics:	AA 1-275
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACER2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ACER2 Protein expressed in mammalian cells.
Sequence:	MGAPHWWDQL QAGSSEVDWC EDNYTIVPAI AEFYNTISNV LFFILPPICM CLFRQYATCF NSGIYLIWTL LVVVGIGSVY FHATLSFLGQ MLDELAVLWV LMCALAMWFP RRYLPKIFRN DRGRFKVVVS VLSAVTTCLA FVKPAINNIS LMTLGVPCTA LLIAELKRCD NMRVFKLGLF SGLWWTLALF CWISDRAFCE LLSSFNFPYL HCMWHILICL AAYLGCVCFA YFDAASEIPE QGPVIKFWPN EKWAFIGVPY VSLLCANKKS SVKIT **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:

Product Details

- 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:	ACER2
Alternative Name:	ACER2 (ACER2 Products)
Background:	Alkaline ceramidase 2 (AlkCDase 2) (Alkaline CDase 2) (haCER2) (EC 3.5.1.-) (EC 3.5.1.23) (Acylsphingosine deacylase 3-like) (N-acylsphingosine amidohydrolase 3-like),FUNCTION: Golgi ceramidase that catalyzes the hydrolysis of ceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:16940153, PubMed:18945876, PubMed:20207939, PubMed:20089856). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:20207939). Has a better catalytic efficiency towards unsaturated long-chain ceramides, including C18:1-, C20:1- and C24:1-ceramides (PubMed:16940153, PubMed:18945876, PubMed:20207939, PubMed:20089856). Saturated long-chain ceramides and unsaturated very long-chain ceramides are also good substrates, whereas saturated very long-chain ceramides and short-chain ceramides are poor substrates (PubMed:20089856). Also hydrolyzes dihydroceramides to produce dihydrosphingosine (PubMed:20207939, PubMed:20628055). It is the ceramidase that controls the levels of circulating sphingosine-1-

Target Details

	phosphate and dihydrosphingosine-1-phosphate in plasma through their production by hematopoietic cells (By similarity). Regulates cell proliferation, autophagy and apoptosis by the production of sphingosine and sphingosine-1-phosphate (PubMed:16940153, PubMed:26943039, PubMed:28294157, PubMed:29229990). As part of a p53/TP53-dependent pathway, promotes for instance autophagy and apoptosis in response to DNA damage (PubMed:26943039, PubMed:28294157, PubMed:29229990). Through the production of sphingosine, may also regulate the function of the Golgi complex and regulate the glycosylation of proteins (PubMed:18945876). {ECO:0000250|UniProtKB:Q8VD53, ECO:0000269|PubMed:16940153, ECO:0000269|PubMed:18945876, ECO:0000269|PubMed:20089856, ECO:0000269|PubMed:20207939, ECO:0000269|PubMed:20628055, ECO:0000269|PubMed:26943039, ECO:0000269|PubMed:28294157, ECO:0000269|PubMed:29229990, ECO:0000303|PubMed:20207939}.
Molecular Weight:	31.3 kDa
UniProt:	Q5QJU3
Pathways:	Positive Regulation of Endopeptidase Activity, Regulation of Carbohydrate Metabolic Process

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