

Datasheet for ABIN7551769

ACER1 Protein (AA 1-264) (His tag)



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Overview

Quantity:	1 mg
Target:	ACER1
Protein Characteristics:	AA 1-264
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACER1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ACER1 Protein expressed in mammalian cells.
Sequence:	<p>MPSIFAYQSS EVDWCESNFQ YSELVAEFYN TFSNIPFFIF GPLMMLLMHP YAQKRSRYIY</p> <p>VVWVLFMIIG LFSMYFHMTL SFLGQLLDEI AILWLLGSGY SIWMPCRYFP SFLGGNRSQF</p> <p>IRLVFITTVV STLLSFLRPT VNAYALNSIA LHILYIVCQE YRKTSNKELR HLIEVSVVLW</p> <p>AVALTSWISD RLLCSFWQRI HFFYLHSIWH VLISITFPYG MVTMALVDAN YEMPGETLKV</p> <p>RYWPRDSWPV GLPYVEIRGD DKDC 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.</p>
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:	<p>Key Benefits:</p> <ul style="list-style-type: none"> Made to order protein - from design to production - by highly experienced protein experts.

Product Details

- 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:	ACER1
Alternative Name:	ACER1 (ACER1 Products)
Background:	<p>Alkaline ceramidase 1 (AlkCDase 1) (Alkaline CDase 1) (EC 3.5.1.-) (EC 3.5.1.23) (Acylsphingosine deacylase 3) (N-acylsphingosine amidohydrolase 3),FUNCTION: Endoplasmic reticulum ceramidase that catalyzes the hydrolysis of ceramides into sphingosine and free fatty acids at alkaline pH (PubMed:17713573, PubMed:20207939, PubMed:20628055). 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:12783875). Exhibits a strong substrate specificity towards the natural stereoisomer of ceramides with D-erythro-sphingosine as a backbone and has a higher activity towards very long-chain unsaturated fatty acids like the C24:1-ceramide (PubMed:17713573, PubMed:20207939). May also hydrolyze dihydroceramides to produce dihydrosphingosine (PubMed:20207939, PubMed:20628055). ACER1 is a skin-specific ceramidase that regulates the levels of ceramides, sphingosine and sphingosine-1-phosphate in the epidermis, mediates the calcium-induced differentiation of epidermal keratinocytes and more generally plays an important role in skin homeostasis (PubMed:17713573). {ECO:0000269 PubMed:17713573, ECO:0000269 PubMed:20207939,</p>

Target Details

ECO:0000269|PubMed:20628055, ECO:0000303|PubMed:12783875}.

Molecular Weight: 31.1 kDa

UniProt: [Q8TDN7](#)

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