

## Product datasheet for PH311332

### ASAH3 (ACER1) (NM\_133492) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ACER1 MS Standard C13 and N15-labeled recombinant protein (NP_597999)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC211332
Predicted MW:	31.1 kDa
Protein Sequence:	>RC211332 protein sequence Red=Cloning site Green=Tags(s)  MPSIFAYQSSEVDWCESNFQYSELVAEFYNTFSNIPFFIFGPLMMLMHPYAQKRSRYIYVWVLFMIIG LFSMYFHMTLSFLGQLLDEIAILWLLGSGYSIWMPRCYFSPFLGGNRSQFIRLVFITTVVSTLLSFLRPT VNAYALNSIALHILYIVCQEYRKTSNKELRHLIEVSVLWAVALTSWISDRLLCSFWQRIHFFYLHSIWH VLISITFPYGMVTMALVDANYEMPGETLKVRYWPRDSWPVGLPYVEIRGDDKDC  TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_597999</a>
RefSeq Size:	1088
RefSeq ORF:	792
Synonyms:	ALKCDase1; ASAH3
Locus ID:	125981
UniProt ID:	<a href="#">Q8TDN7</a>



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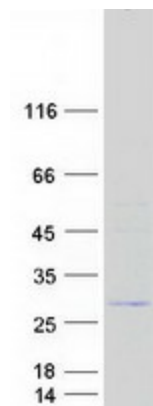
**Cytogenetics:** 19p13.3

**Summary:** Ceramides are synthesized during epidermal differentiation and accumulate within the interstices of the stratum corneum, where they represent critical components of the epidermal permeability barrier. Excess cellular ceramide can trigger antimetogenic signals and induce apoptosis, and the ceramide metabolites sphingosine and sphingosine-1-phosphate (S1P) are important bioregulatory molecules. Ceramide hydrolysis in the nucleated cell layers regulates keratinocyte proliferation and apoptosis in response to external stress. Ceramide hydrolysis also occurs at the stratum corneum, releasing free sphingoid base that functions as an endogenous antimicrobial agent. ACER1 is highly expressed in epidermis and catalyzes the hydrolysis of very long chain ceramides to generate sphingosine (Houben et al., 2006 [PubMed 16477081]; Sun et al., 2008 [PubMed 17713573]).[supplied by OMIM, Jul 2010]

**Protein Families:** Transmembrane

**Protein Pathways:** Metabolic pathways, Sphingolipid metabolism

### Product images:



Coomassie blue staining of purified ACER1 protein (Cat# [TP311332]). The protein was produced from HEK293T cells transfected with ACER1 cDNA clone (Cat# [RC211332]) using MegaTran 2.0 (Cat# [TT210002]).