

Recombinant Mouse ASAH2 Protein (His Tag)

Catalog No. PKSM040922

Note: Centrifuge before opening to ensure complete recovery of vial contents.

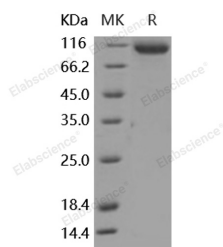
Description

Synonyms	AI585898
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Thr 34-Thr 756
Accession	NP_061300.1
Calculated Molecular Weight	82.0 kDa
Observed molecular weight	105-115 kDa
Tag	N-His
Bioactivity	Measured by its ability to hydrolyze the substrate C12:0 ceramide into sphingosine and dodecanoic acid. The specific activity is > 3,000 pmoles/min/μg.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

ASAH2 (N-acylsphingosine amidohydrolase 2), also known as neutral ceramidase, is a type II integral membrane protein

For Research Use Only

that can be cleaved to produce a soluble secreted protein. The enzyme is abundant in the brush border membranes of the intestine, and also expressed in several tissues such as kidney, brain and liver. The primary structure of ASAH2/neutral ceramidase is highly conserved from bacteria to humans, however, there is a clear difference in the molecular architecture. The murine ASAH2 possesses 'amucin box', a Ser/Thr/Pro-rich domain glycosylated with O-glycans which is necessary to retain the enzyme on the plasma membrane as a type II integral protein. The major physiological function of ASAH2/neutral ceramidase is the metabolism of dietary sphingolipids, and thus plays a role in the generation of messenger molecules such as sphingosine and sphingosine 1-phosphate.