Recombinant Protein Technical Manual

Recombinant Mouse ASAH2 Protein (His Tag)(Active)

RPES0274

Product Data:

Product SKU: RPES0274

Size: 10µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_061300.1

Protein Information:

Molecular Mass: 82 kDa

AP Molecular Mass: 10515 kDa

Tag: N-His

Bio-activity: 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.

Purity: > 97 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: AI585898

Immunogen Information:

Sequence: Thr 34-Thr 756

Background:

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