Recombinant SPHM protein (His tag)

Catalog Number	547050
Synonyms	Sulfoglucosamine sulfamidase; Sulphamidase
Species	Human
Expression System	E. coli
Accession	P51688
Molecular Weight	Predictes a molecular mass of 56.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	21-502
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 21-502 aa (P51688) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant N-sulphoglucosamine sulphohydrolase (Sulfoglucosamine sulfamidase), a lysosomal enzyme critical for heparan sulfate degradation, is offered as a stable and soluble fragment (residues 21-502) optimized for structural and biochemical studies. N-sulphoglucosamine sulphohydrolase (SGSH), encoded by the SGSH gene in humans, catalyzes a key step in the lysosomal degradation of heparan sulfate. This enzymatic activity is essential for maintaining proper glycosaminoglycan metabolism, with implications for cellular homeostasis. The protein is localized to the lysosome, where it performs its hydrolytic function in the breakdown pathway of heparan sulfate, a process vital for normal lysosomal function and cellular health.