Recombinant GBA3 protein (His tag)

Catalog Number	543589
Synonyms	Cytosolic beta-glucosidase-like protein 1; Cytosolic galactosylceramidase; Cytosolic glucosylceramidase; Cytosolic glycosylceramidase; Cytosolic GCase; Glucosidase beta acid 3; Glucosylceramidase beta 3; Klotho-related protein; KLrP
Species	Human
Expression System	E. coli
Accession	Q9H227
Molecular Weight	Predictes a molecular mass of 55.36 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band.

Product Information

Sequence Region	1-469
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-469 aa (Q9H227) 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 Human Cytosolic beta-glucosidase (GBA3) Fragment (aa 1-469) - A highly purified, stable protein fragment ideal for investigating cytosolic glycosidase activities, xenobiotic metabolism, and glycosphingolipid catabolism in biochemical and structural studies. Cytosolic beta-glucosidase (GBA3) is a neutral cytosolic beta-glycosidase with broad substrate specificity that plays a role in the catabolism of glycosylceramides. The enzyme demonstrates significant glucosylceramidase activity in vitro and can hydrolyze galactosylceramides, glucosylsphingosines, and galactosylsphingosines. Additionally, GBA3 functions in the metabolism of dietary glycosides including phytoestrogens, flavonols, flavones, flavanones, and cyanogens, suggesting a potential role in xenobiotic processing. The protein also possesses transxylosylase activity and may contribute to the catabolism of cytosolic sialyl free N-glycans. GBA3 is localized exclusively in the cytoplasm and cytosol, where it performs its diverse glycosidase functions.