Recombinant ABHDB protein (His tag)

Catalog Number	545486
Synonyms	Alpha/beta hydrolase domain-containing protein 11; Abhydrolase domain-containing protein 11; Williams-Beuren syndrome chromosomal region 21 protein
Species	Human
Expression System	E. coli
Accession	Q8NFV4
Molecular Weight	Predictes a molecular mass of 30.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	43-306
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 43-306 aa (Q8NFV4) 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 ABHD11 (sn-1-specific diacylglycerol lipase) Fragment (residues 43-306) is a highly purified protein designed for lipid metabolism research. This 264-amino acid fragment retains key functional regions, offering exceptional stability and solubility for structural studies, enzymatic assays, and mechanistic investigations into diacylglycerol hydrolysis. ABHD11 is a mitochondrial enzyme that catalyzes the hydrolysis of diacylglycerol, preferentially cleaving stearate from the sn-1 position of 1,2-diacyl-sn-glycerols. It serves as a critical regulator of intracellular diacylglycerol levels and lipid metabolism. Additionally, ABHD11 maintains functional lipoylation of the 2-oxoglutarate dehydrogenase complex by preventing lipoyl adduct formation and supports embryonic stem cell expansion and differentiation. The protein localizes to the mitochondrial matrix, underscoring its role in metabolic regulation and cellular development.