Recombinant ASM3B protein (His tag)

Catalog Number	547849
Synonyms	ASM-like phosphodiesterase 3b
Species	Human
Expression System	E. coli
Accession	Q92485
Molecular Weight	Predictes a molecular mass of 50.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	19-455
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 19-455 aa (Q92485) 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 Acid sphingomyelinase-like phosphodiesterase 3b (SMPDL3B) fragment (residues 19-455) is a high-purity protein designed for structural and biochemical studies. This 437-amino acid fragment represents a stable, soluble unit ideal for investigating lipid-modulating phosphodiesterase activity and its regulatory roles in immune signaling pathways. Acid sphingomyelinase-like phosphodiesterase 3b, encoded by the SMPDL3B gene, is a lipid-modulating phosphodiesterase that influences macrophage lipid composition and membrane fluidity. The protein acts as a negative regulator of Toll-like receptor signaling and demonstrates in vitro phosphodiesterase activity, though its physiological substrate remains unidentified. While it lacks activity toward phosphocholine-containing lipids, it can cleave CDP-choline and release phosphate from ATP and ADP. The full-length protein is secreted and localizes to the cell membrane via a GPI-anchor, positioning it to modulate immune responses at the cell surface. The recombinant fragment (19-455) encompasses the complete functional domain, providing researchers with a valuable tool for exploring its mechanistic roles in lipid metabolism and immune regulation.