Recombinant SIDT1 protein (His tag)

Catalog Number	549111
Species	Human
Expression System	E. coli
Accession	Q9NXL6
Molecular Weight	Predictes a molecular mass of 32.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	44-309
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 44-309 aa (Q9NXL6) 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 SID1 transmembrane family member 1 (SIDT1) fragment (residues 44-309) from Homo sapiens, designed for structural and functional studies. This 266-amino acid soluble fragment retains key properties for investigating dsRNA binding mechanisms in vitro. SIDT1 is a multi-pass transmembrane protein localized to the membrane in human cells. It specifically binds long double-stranded RNA (dsRNA) of 500-700 base pairs in vitro, but does not interact with shorter dsRNA (<300 bp). Importantly, it is not involved in RNA autophagy, the ATP-dependent process of direct RNA import into lysosomes for degradation. This makes SIDT1 a crucial protein for studying selective dsRNA recognition and membrane-associated RNA processing pathways.