Recombinant WDFY4 protein (His tag)

Catalog Number	548996
Species	Human
Expression System	E. coli
Accession	Q6ZS81
Molecular Weight	Predictes a molecular mass of 45.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	993-1400
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 993-1400 aa (Q6ZS81) 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 WD repeat- and FYVE domain-containing protein 4 (WDFY4) fragment (residues 993-1400) is a high-quality, stable protein designed for structural and biochemical studies. This 408-amino acid fragment, derived from the critical antigen cross-presentation regulator WDFY4, offers researchers a soluble and functional unit ideal for investigating immune response mechanisms and cellular trafficking pathways. WD repeat- and FYVE domain-containing protein 4 (WDFY4) plays an essential role in regulating cross-presentation of viral and tumor antigens in conventional type 1 dendritic cells (cDC1), a crucial process for adaptive immune responses. The protein functions by interacting with endosomal membranes near the plasma membrane to facilitate endosomal-to-cytosol antigen trafficking. Additionally, WDFY4 contributes to B-cell survival through autophagy regulation. The full-length protein localizes to early endosomes and the endoplasmic reticulum, highlighting its involvement in intracellular membrane trafficking systems. The recombinant fragment (993-1400) represents a stable, soluble region selected through computational analysis to enable detailed mechanistic studies of WDFY4's functional properties.