Recombinant WASH2 protein (His tag)

Catalog Number	545242
Synonyms	CXYorf1-like protein on chromosome 2; Protein FAM39B
Species	Human
Expression System	E. coli
Accession	Q6VEQ5
Molecular Weight	Predictes a molecular mass of 29.12 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1-245
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 1-245 aa (Q6VEQ5) 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 WAS protein family homolog 2 (FAM39B) fragment (amino acids 1-245) is a high-quality protein designed for structural and biochemical studies. This stable and soluble fragment enables researchers to investigate the role of FAM39B in actin polymerization and endosomal trafficking, offering a reliable tool for advancing cellular and molecular biology research. The full-length WAS protein family homolog 2 (FAM39B), encoded by the WASH2P gene in Homo sapiens, functions as a nucleation-promoting factor on endosome membranes. It recruits and activates the Arp2/3 complex to drive actin polymerization, which is essential for the fission of transport tubules during endosome sorting. This protein is involved in key cellular processes, including endocytic trafficking of EGF, transferrin receptor recycling, and the regulation of integrin trafficking for invasive cell migration. In immune cells, it facilitates the recycling of receptors such as the T-cell receptor and MHC class II, supporting T-cell activation and antigen presentation. Additionally, FAM39B localizes to early and recycling endosomes, late endosomes, autophagosomes, and centrosomes, with its membrane association mediated by interaction with WASHC2. Its roles extend to Salmonella invasion and autophagy regulation, highlighting its broad significance in cellular dynamics and disease pathways.