Recombinant WASP protein (His tag)

Catalog Number	544610
Synonyms	Wiskott-Aldrich syndrome protein; WASp
Species	Human
Expression System	E. coli
Accession	P42768
Molecular Weight	Predictes a molecular mass of 18.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	2-153
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 2-153 aa (P42768) 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 WASp Fragment (2-153) is a high-purity protein designed for studying the WH1 domain's role in actin cytoskeleton regulation. This fragment offers researchers a targeted tool to investigate domain-specific interactions and functions in cellular processes such as actin polymerization and immune cell signaling. The full-length Wiskott-Aldrich syndrome protein (WASp), encoded by the WAS gene, is a key regulator of actin cytoskeleton dynamics. It acts as an effector for Rho-type GTPases, promoting actin polymerization through interaction with the Arp2/3 complex. WASp is critical for lymphocyte and platelet function, facilitates actin pedestal formation during bacterial infections, and also operates in the nucleus to support DNA repair mechanisms like homologous recombination by driving nuclear actin polymerization. Localized to both the cytoplasm (associated with the cytoskeleton) and the nucleus, WASp integrates cytoskeletal organization with nuclear functions, underscoring its broad significance in cellular integrity and response pathways.