Recombinant FA83D protein (His tag)

Catalog Number	548237
Synonyms	Spindle protein CHICA
Species	Human
Expression System	E. coli
Accession	Q9H4H8
Molecular Weight	Predictes a molecular mass of 38.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	1-331
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 1-331 aa (Q9H4H8) 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	Introducing the recombinant Protein FAM83D (Spindle protein CHICA) fragment (residues 1-331), a highly stable and soluble unit designed for advanced structural and biochemical studies. This fragment enables researchers to explore the protein's critical roles in cell proliferation, mitotic regulation, and signaling pathways with enhanced experimental reliability. Protein FAM83D, encoded by the FAM83D gene in Homo sapiens, plays multifaceted roles in cellular processes. It indirectly modulates the expression and signaling of key regulators like MTOR, JUN, and MYC by promoting the degradation of FBXW7. Additionally, FAM83D activates the ERK1/ERK2 signaling cascade to drive cell proliferation and ensures proper chromosome alignment during mitosis through its interaction with KIF22. Subcellularly, it localizes primarily to the cytoplasm during interphase and associates with spindle microtubules—concentrating at spindle poles—from prophase through anaphase, underscoring its importance in mitotic fidelity.