Recombinant FAP20 protein (His tag)

Catalog Number	542907
Synonyms	FANCA-associated protein of 20 kDa; Fanconi anemia-associated protein of 20 kDa
Species	Human
Expression System	E. coli
Accession	Q6NZ36
Molecular Weight	Predictes a molecular mass of 11.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	1-91
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-91 aa (Q6NZ36) 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 FAAP20 (1-91) is a high-quality protein fragment of Fanconi anemia core complex-associated protein 20, specifically designed for structural and biochemical studies. This 91-amino acid fragment represents a stable, soluble unit ideal for investigating DNA damage response mechanisms and Fanconi anemia pathway function. FAAP20 is a critical component of the Fanconi anemia (FA) complex, essential for DNA interstrand cross-link (ICL) repair. The full-length protein functions by recognizing and binding to 'Lys-63'-linked ubiquitin generated by RNF8 at DNA damage sites, thereby recruiting other FA complex components to promote ICL repair. FAAP20 also facilitates translesion synthesis through interaction with REV1. The protein localizes primarily to the nucleus and chromosomes, where it is specifically recruited to ICL sites following DNA damage through its ubiquitin-binding activity. This recombinant fragment provides researchers with a valuable tool for studying the molecular mechanisms underlying DNA repair processes and Fanconi anemia pathology.