Recombinant EFCB7 protein (His tag)

Catalog Number	548889
Species	Human
Expression System	E. coli
Accession	A8K855
Molecular Weight	Predictes a molecular mass of 22.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	1-183
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 1-183 aa (A8K855) 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 EF-hand calcium-binding domain-containing protein 7 (EFCAB7) fragment (residues 1-183) from Homo sapiens, encompassing both EF-hand domains. This high-purity protein is an essential tool for investigating ciliary Hedgehog signaling mechanisms and calcium-binding functions in primary cilia research. EFCAB7 is a critical component of the EvC complex, which positively regulates ciliary Hedgehog (Hh) signaling pathways. The full-length protein localizes to the cilium membrane as a peripheral membrane protein on the cytoplasmic side, specifically at the base of primary cilia in the EvC zone. EFCAB7 is required for proper localization of the EVC2:EVC subcomplex to ciliary bases, playing a fundamental role in ciliary function and Hh signaling regulation. The provided fragment contains both EF-hand calcium-binding domains (residues 102-137 and 138-173), enabling focused study of calcium-binding properties and domain-specific interactions within the EvC complex.