Recombinant EFC12 protein (His tag)

Catalog Number	551394
Species	Human
Expression System	E. coli
Accession	Q6NXP0
Molecular Weight	Predictes a molecular mass of 30.26 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	181-427
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 181-427 aa (Q6NXP0) 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	This high-purity recombinant protein corresponds to a 247-amino acid fragment (residues 181-427) of human EF-hand calcium-binding domain-containing protein 12 (EFCAB12). The fragment is expertly engineered to fully encompass the critical EF-hand domain (residues 196-231), providing an ideal, focused tool for researchers investigating the specific calcium-binding functions and structural properties of this domain in vitro. EF-hand calcium-binding domain-containing protein 12 (EFCAB12) is a human protein encoded by the EFCAB12 gene (UniProt ID: Q6NXP0). Proteins containing EF-hand domains are central to calcium-mediated signaling pathways, which regulate a vast array of cellular processes including muscle contraction, neurotransmission, cell proliferation, and gene expression. By isolating the functional EF-hand domain within this recombinant fragment, researchers can directly study its calcium affinity, interaction partners, and conformational changes in a controlled setting, bypassing the complexity of the full-length protein. This targeted approach accelerates the functional characterization of this specific domain and its role in cellular calcium signaling.