Recombinant AP2C protein (His tag)

Catalog Number	540906
Synonyms	AP2-gamma; Activating enhancer-binding protein 2 gamma; Transcription factor ERF-1
Species	Human
Expression System	E. coli
Accession	Q92754
Molecular Weight	Predictes a molecular mass of 27.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	218-450
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 218-450 aa (Q92754) 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 Transcription factor AP-2 gamma (AP2-gamma) Fragment (aa 218-450) - A high-quality recombinant protein representing a stable and soluble unit of the key embryonic development regulator TFAP2C, specifically designed for structural and biochemical research applications. Transcription factor AP-2 gamma (TFAP2C) is a sequence-specific DNA-binding transcription factor that interacts with cellular enhancer elements to regulate gene transcription and plays a crucial role in early embryonic development. This protein binds to the consensus sequence 5'-GCCNNNGGC-3' and activates genes involved in diverse biological functions. TFAP2C is essential for regulating both inner cell mass and trophectoderm differentiation during embryonic development, controlling cell-polarity genes at the 8-cell stage and binding to trophectoderm genes in blastocysts. The protein also functions in epigenetic regulation, particularly in the MTA1-mediated regulation of ESR1 expression in breast cancer. TFAP2C localizes to the nucleus and interacts with other transcription factors to bind both closed and open chromatin regions. The recombinant fragment (aa 218-450) represents a computationally selected stable and soluble region, making it ideal for investigating the structural and functional properties of this important developmental regulator.