Recombinant BATF protein (His tag)

Catalog Number	547365
Synonyms	B-cell-activating transcription factor; B-ATF; SF-HT-activated gene 2 protein; SFA-2
Species	Human
Expression System	E. coli
Accession	Q16520
Molecular Weight	Predictes a molecular mass of 15.77 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-125
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 1-125 aa (Q16520) 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 BATF (1-125) Fragment - A high-purity protein fragment encompassing the essential bZIP domain of Basic leucine zipper transcriptional factor ATF-like (B-ATF), designed for studying AP-1 family transcription factor mechanisms in immune cell differentiation and function. BATF is a crucial AP-1 family transcription factor that orchestrates immune cell differentiation through formation of heterodimers with JUNB and complexes with IRF4/IRF8. This protein controls lineage-specific differentiation of T-helper 17 cells (Th17), follicular T-helper cells (TfH), CD8+ dendritic cells, and mediates class-switch recombination in B-cells. BATF recognizes specific DNA sequences (5'-TGA[CG]TCA-3') and AICE immune regulatory elements (5'-TGAnTCA/GAAA-3') to activate immune-specific gene expression. The protein localizes to both nucleus and cytoplasm, with increased nuclear translocation following T-cell activation, where it regulates key transcription factors including RORC, BCL6, MAF, and AICDA to drive immune cell fate decisions and functional specialization.