# Recombinant ATF5 protein (His tag)

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| **Catalog Number** | 548549 |
| **Synonyms** | cAMP-dependent transcription factor ATF-5; Activating transcription factor 5; Transcription factor ATFx |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q9Y2D1 |
| **Molecular Weight** | Predictes a molecular mass of 10.72 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band. |

## Product Information

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| **Sequence Region** | 207-282 |
| **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 207-282 aa (Q9Y2D1) were fused with 6His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant ATF5 bZIP Domain Fragment (aa 207-282) is a high-purity protein derived from the human activating transcription factor ATF-5. This 76-amino acid fragment fully encompasses the essential bZIP domain, making it an ideal tool for studying DNA binding, dimerization, and transcriptional regulation mechanisms in cellular processes such as survival, proliferation, and differentiation.<br>The full-length ATF5 protein is a versatile transcription factor in Homo sapiens that modulates gene expression by binding to various DNA regulatory elements, including cAMP response elements (CRE), ATF5-specific response elements (ARE), and amino acid response elements (AARE). It plays critical, cell type-dependent roles in promoting cell survival, proliferation, and differentiation, such as maintaining cerebral cortex neuroprogenitor cells and supporting olfactory sensory neuron viability. ATF5 also functions in centrosome dynamics, regulating centrosome structure and cell cycle progression. It localizes to the cytoplasm, nucleus, and centrosome, with dynamic translocation during the cell cycle. The provided fragment (aa 207-282) contains the bZIP domain, which is central to ATF5's DNA-binding and dimerization capabilities, enabling targeted investigation of its transcriptional functions. |