Recombinant STF1 protein (His tag)

Catalog Number	540249
Synonyms	SF-1; STF-1; hSF-1; Adrenal 4-binding protein; Fushi tarazu factor homolog 1; Nuclear receptor subfamily 5 group A member 1; Steroid hormone receptor Ad4BP
Species	Human
Expression System	E. coli
Accession	Q13285
Molecular Weight	Predictes a molecular mass of 29.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	222-461
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 222-461 aa (Q13285) 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 Steroidogenic Factor 1 (SF-1) Fragment (NR5A1, residues 222-461) – a high-purity protein fragment encompassing the complete nuclear receptor ligand-binding domain (LBD), designed for functional studies of steroidogenic regulation and transcriptional activation. Steroidogenic Factor 1 (SF-1), encoded by the NR5A1 gene, is a critical transcriptional activator essential for sexual differentiation and the development of primary steroidogenic tissues. It binds to specific promoter regions (e.g., 5'-YCAAGGYC-3' and 5'-RRAGGTCA-3') of steroidogenic P450 genes such as CYP11A, CYP11B, and CYP21B, and regulates genes including AMH, ACH, and STAR. SF-1 forms complexes with proteins like SFPQ-NONO to modulate cAMP-dependent transcription and is activated by HIPK3-mediated phosphorylation. It localizes to the nucleus and interacts with phospholipids, including phosphatidylinositol phosphates. The provided fragment (residues 222-461) contains the full LBD, enabling targeted investigation of domain-specific functions in steroidogenesis and nuclear receptor signaling.