Recombinant NR6A1 protein (His tag)

Catalog Number	540339
Synonyms	Germ cell nuclear factor; GCNF; hGCNF; Retinoid receptor-related testis-specific receptor; RTR; hRTR
Species	Human
Expression System	E. coli
Accession	Q15406
Molecular Weight	Predictes a molecular mass of 29.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	245-480
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 245-480 aa (Q15406) 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 NR6A1 (GCNF) Fragment (aa 245-480) - A high-purity protein fragment encompassing the complete nuclear receptor ligand-binding domain (LBD) of Nuclear receptor subfamily 6 group A member 1, ideal for studying transcriptional regulation, embryonic stem cell differentiation, and germ cell development mechanisms. Nuclear receptor subfamily 6 group A member 1 (GCNF) is an orphan nuclear receptor that binds to DNA response elements containing the sequence 5'-TCAAGGTCA-3'. It functions as a key regulator of embryonic stem cell pluripotency by mediating repression of POU5F1/OCT4 through binding to the DR0 element within the POU5F1/OCT4 promoter, thereby inhibiting POU5F1/OCT4 expression during embryonic stem cell differentiation. The protein is also involved in regulating gene expression during germ cell development and gametogenesis. GCNF is localized to the nucleus, where it exerts its transcriptional regulatory functions. The provided fragment (amino acids 245-480) contains the complete ligand-binding domain, making it particularly valuable for investigating the molecular mechanisms of nuclear receptor function and transcriptional regulation.