Recombinant ANDR protein (His tag)

Catalog Number	546743
Synonyms	Dihydrotestosterone receptor; Nuclear receptor subfamily 3 group C member 4
Species	Human
Expression System	E. coli
Accession	P10275
Molecular Weight	Predictes a molecular mass of 30.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	673-920
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 673-920 aa (P10275) 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	Introducing the recombinant Androgen Receptor (AR) fragment (residues 673-920), a highly stable and soluble protein unit derived from Homo sapiens. This fragment is expertly engineered for structural and biochemical studies, offering researchers a reliable tool to investigate the mechanisms of androgen signaling and receptor function without the complexities of the full-length protein. The full-length Androgen Receptor (AR), encoded by the AR gene, is a steroid hormone-activated transcription factor that plays a pivotal role in regulating eukaryotic gene expression, influencing cellular proliferation and differentiation in target tissues. Its transcriptional activity is modulated by coactivators and corepressors, such as ZBTB7A, which recruits NCOR1 and NCOR2 to androgen response elements, thereby negatively regulating AR signaling and androgen-induced cell proliferation. Activation can be influenced by kinases like HIPK3 and ZIPK/DAPK3, though not through phosphorylation. The receptor is primarily localized in the cytoplasm in its unligated form and translocates to the nucleus upon ligand binding, where it is detected at the promoters of target genes. Certain isoforms lacking the C-terminal ligand-binding domain may constitutively activate transcription independently of steroid hormones. This fragment (673-920) provides a focused approach to study AR's functional domains, aiding in the dissection of its critical roles in hormonal pathways and disease contexts.