Recombinant RORG protein (His tag)

Catalog Number	540017
Synonyms	Nuclear receptor RZR-gamma; Nuclear receptor subfamily 1 group F member 3; RAR-related orphan receptor C; Retinoid-related orphan receptor-gamma
Species	Human
Expression System	E. coli
Accession	P51449
Molecular Weight	Predictes a molecular mass of 31.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	265-518
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 265-518 aa (P51449) 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 RORC (RAR-related orphan receptor C) Fragment (aa 265-518) is a high-purity protein encompassing the ligand-binding domain (LBD), essential for studying nuclear receptor functions in circadian rhythm, metabolism, and immune regulation. This fragment serves as an ideal tool for investigating domain-specific interactions, ligand binding assays, and transcriptional activity studies. Nuclear receptor ROR-gamma (RORC), encoded by the RORC gene in Homo sapiens, is a key transcriptional regulator that binds DNA as a monomer to ROR response elements (RORE). It plays critical roles in cellular differentiation, immunity, peripheral circadian rhythm, and the metabolism of lipids, steroids, xenobiotics, and glucose. RORC exhibits intrinsic transcriptional activity, modulated by natural ligands like oxysterols, and recruits cofactors to regulate target genes, including clock genes (e.g., BMAL1, CRY1) and metabolic enzymes (e.g., G6PC1). It is also indispensable for IFN-gamma-dependent anti-mycobacterial immunity and, in isoform 2, for thymopoiesis and T-helper 17 (TH17) cell differentiation. The protein localizes to the nucleus, as confirmed by experimental evidence, underscoring its role in gene expression regulation.