Recombinant ORC3 protein (His tag)

Catalog Number	541444
Synonyms	Origin recognition complex subunit Latheo
Species	Human
Expression System	E. coli
Accession	Q9UBD5
Molecular Weight	Predictes a molecular mass of 20.22 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	548-711
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 548-711 aa (Q9UBD5) 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 Origin Recognition Complex Subunit 3 (ORC3) Fragment (548-711) is a stable and soluble protein fragment designed for structural and biochemical studies. This product enables researchers to investigate the mechanisms of DNA replication initiation through a well-characterized segment of the ORC3 protein, supporting advanced research in cell biology and genomics. Origin Recognition Complex Subunit 3 (ORC3) is a key component of the origin recognition complex (ORC) in humans, which binds to origins of DNA replication in an ATP-dependent manner. ORC is essential for assembling the pre-replication complex required to initiate DNA replication. Additionally, ORC3 interacts with histone H3 and H4 trimethylation marks (H3K9me3, H3K27me3, and H4K20me3), linking replication initiation with epigenetic regulation. The protein localizes to the nucleus and chromosomes, underscoring its central role in genomic stability and cell division processes.