Recombinant ORC1 protein (His tag)

Catalog Number	544924
Synonyms	Replication control protein 1
Species	Human
Expression System	E. coli
Accession	Q13415
Molecular Weight	Predictes a molecular mass of 21.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	1-173
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 1-173 aa (Q13415) 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 ORC1 (Origin Recognition Complex Subunit 1) Fragment (1-173) is a high-purity protein designed to encompass the BAH domain, providing an essential tool for studying replication initiation mechanisms and domain-specific functions in DNA replication research. Origin Recognition Complex Subunit 1 (ORC1) is a critical component of the origin recognition complex (ORC) that binds origins of replication in an ATP-dependent manner. As part of the pre-replication complex assembly required for DNA replication initiation, ORC1 plays a fundamental role in cell division and replication control. The protein is localized to the nucleus, where it functions in the early stages of DNA replication. While specific origin of replication sequences remain unidentified, ORC1's function in replication initiation makes it vital for understanding cell cycle regulation and DNA replication processes.