Recombinant CNOT2 protein (His tag)

Catalog Number	541414
Synonyms	CCR4-associated factor 2
Species	Human
Expression System	E. coli
Accession	Q9NZN8
Molecular Weight	Predictes a molecular mass of 25.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	335-540
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 335-540 aa (Q9NZN8) 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 CCR4-NOT transcription complex subunit 2 (CCR4-associated factor 2) fragment (residues 335-540) is a 206-amino acid protein designed for structural and biochemical studies. This fragment was computationally selected for optimal stability and solubility, offering researchers a reliable tool to investigate the CNOT2 protein's role in mRNA regulation and transcriptional control. CCR4-NOT transcription complex subunit 2 (CNOT2) is a key component of the CCR4-NOT complex, a major cellular mRNA deadenylase involved in bulk mRNA degradation, miRNA-mediated repression, translational repression during initiation, and general transcription regulation. The complex influences diverse cellular processes through mRNA expression control. CNOT2 is critical for maintaining the structural integrity of the CCR4-NOT complex and has been implicated in transcriptional repression, potentially through interactions with the N-Cor repressor complex containing HDAC3, NCOR1, and NCOR2. It also plays a role in maintaining embryonic stem cell identity. The protein localizes to both the cytoplasm and nucleus, reflecting its dual roles in post-transcriptional and transcriptional regulatory mechanisms.