Recombinant RBX2 protein (His tag)

Catalog Number	546156
Synonyms	Rbx2; CKII beta-binding protein 1; CKBBP1; RING finger protein 7; Regulator of cullins 2; Sensitive to apoptosis gene protein
Species	Human
Expression System	E. coli
Accession	Q9UBF6
Molecular Weight	Predictes a molecular mass of 14.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	2-113
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-113 aa (Q9UBF6) 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 RING-box protein 2 (Rbx2) Fragment (aa 2-113) is a high-purity, soluble protein designed for structural and functional studies. This fragment encompasses the catalytic RING domain essential for E3 ubiquitin ligase activity, providing researchers with a stable and biochemically active tool to investigate ubiquitination pathways, protein degradation mechanisms, and cellular signaling processes. RING-box protein 2 (Rbx2), encoded by the RNF7 gene, serves as the catalytic component of multiple cullin-5-RING E3 ubiquitin-protein ligase complexes (ECS complexes). These complexes mediate the ubiquitination and subsequent proteasomal degradation of target proteins, playing crucial roles in cell cycle regulation, signal transduction, transcription, and apoptosis protection. Rbx2 recruits E2 ubiquitination enzymes via its RING domain and facilitates substrate ubiquitination in processes ranging from reelin signaling (through DAB1 degradation) to Ras signaling (via NF1 degradation) and immune regulation (through CGAS ubiquitination). The protein localizes to both the cytoplasm and nucleus, and its activity is exploited by pathogens such as HIV-1, which hijacks ECS complexes to degrade host restriction factors like APOBEC3F/G. The provided fragment (aa 2-113) represents a stable, soluble unit optimized for investigating Rbx2's catalytic mechanisms and interactions in vitro.