Recombinant HOIL1 protein (His tag)

Catalog Number	543545
Synonyms	HBV-associated factor 4; Heme-oxidized IRP2 ubiquitin ligase 1; HOIL-1; Hepatitis B virus X-associated protein 4; RING finger protein 54; RING-type E3 ubiquitin transferase HOIL-1; Ubiquitin-conjugating enzyme 7-interacting protein 3
Species	Human
Expression System	E. coli
Accession	Q9BYM8
Molecular Weight	Predictes a molecular mass of 18.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	1-151
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-151 aa (Q9BYM8) 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 RBCK1 (1-151) Fragment. This high-purity recombinant protein encompasses the ubiquitin-like domain (residues 55-119) of RanBP-type and C3HC4-type zinc finger-containing protein 1, a key E3 ubiquitin ligase involved in linear polyubiquitination and NF-kappa-B signaling. Ideal for domain-specific functional studies, ubiquitination assays, and inflammation research. The full-length RBCK1 protein, also known as HOIL-1 or RNF54, is a RING-type E3 ubiquitin ligase that plays a critical role in the linear ubiquitin chain assembly complex (LUBAC). It accepts ubiquitin from E2 conjugating enzymes like UBE2L3 and transfers it to substrates, mediating linear ('Met-1'-linked) polyubiquitination of key signaling components including IKBKG and RIPK1. RBCK1 is essential for activation of canonical NF-kappa-B and JNK signaling pathways, regulation of inflammation, and prevention of TNF-induced cell death. Additionally, it functions in innate immunity by promoting linear ubiquitin coat formation on cytosolic bacteria for xenophagy, and regulates Wnt signaling during angiogenesis in conjunction with OTULIN. The protein also ubiquitinates oxidized IREB2 in a heme- and oxygen-dependent manner and promotes degradation of TAB2 and IRF3 via the proteasome.