Recombinant DTX3L protein (His tag)

Catalog Number	545529
Synonyms	B-lymphoma- and BAL-associated protein; Protein deltex-3-like; RING-type E3 ubiquitin transferase DTX3L; Rhysin-2; Rhysin2
Species	Human
Expression System	E. coli
Accession	Q8TDB6
Molecular Weight	Predictes a molecular mass of 33.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	234-508
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 234-508 aa (Q8TDB6) 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 E3 ubiquitin-protein ligase DTX3L (EC 2.3.2.27) fragment (residues 234-508) is a 275-amino acid protein derived from human DTX3L, optimized for stability and solubility. This fragment supports structural and biochemical studies of DTX3L's roles in DNA damage repair, interferon-mediated antiviral responses, and chromatin remodeling, offering a reliable tool for investigating ubiquitination mechanisms and cellular signaling pathways. E3 ubiquitin-protein ligase DTX3L is a multifunctional enzyme involved in key cellular processes, including DNA damage repair and interferon-mediated antiviral defense. In partnership with PARP9, DTX3L monoubiquitinates histones such as H4 at Lys-91 (H4K91ub1), facilitating DNA damage response and histone modification crosstalk. It also promotes STAT1-dependent transcription to regulate viral replication and mediates Lys-48-linked ubiquitination of viral proteases for proteasomal degradation. DTX3L localizes to the cytoplasm, nucleus, early endosomes, and lysosomes, translocating to nuclear DNA damage sites in a PARP1-dependent manner and modulating endosomal sorting by influencing ITCH activity. Its dynamic subcellular distribution underscores its importance in cellular homeostasis and pathogen defense.