Recombinant DTX1 protein (His tag)

Catalog Number	547657
Synonyms	Protein deltex-1; Deltex1; hDTX1; RING-type E3 ubiquitin transferase DTX1
Species	Human
Expression System	E. coli
Accession	Q86Y01
Molecular Weight	Predictes a molecular mass of 22.75 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	1-181
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 1-181 aa (Q86Y01) 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 E3 ubiquitin-protein ligase DTX1 fragment (amino acids 1-181), encompassing the WWE 1 and WWE 2 domains. This high-purity protein is an essential tool for investigating domain-specific mechanisms in Notch signaling, ubiquitination, and cell fate regulation. E3 ubiquitin-protein ligase DTX1 is a RING-type ubiquitin transferase that functions as a key regulator of Notch signaling, a pathway critical for cell-cell communication and fate determination in processes like neurogenesis, lymphogenesis, and myogenesis. It primarily acts as a positive regulator of Notch but can also exert negative effects depending on cellular context, such as by ubiquitinating and promoting degradation of MEKK1. DTX1 is involved in B-cell development and may antagonize NOTCH1 to influence immune cell differentiation. The protein is predominantly localized in the cytoplasm, associates with endocytic vesicles, and is partially nuclear, reflecting its diverse roles in ubiquitin-mediated protein degradation and transcriptional regulation.