Recombinant ERLEC protein (His tag)

Catalog Number	538692
Synonyms	ER lectin; Erlectin; XTP3-transactivated gene B protein
Species	Human
Expression System	E. coli
Accession	Q96DZ1
Molecular Weight	Predictes a molecular mass of 29.66 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	41-281
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 41-281 aa (Q96DZ1) 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 Endoplasmic Reticulum Lectin 1 (ERLEC1) Fragment (aa 41-281) is a high-quality protein product encompassing the complete MRH domain (aa 111-246). This fragment serves as an essential tool for investigating lectin-mediated protein quality control mechanisms within the endoplasmic reticulum, providing researchers with a specific domain-focused reagent for functional studies. Endoplasmic Reticulum Lectin 1 (ERLEC1) is a probable lectin that selectively binds to improperly folded lumenal proteins, playing a critical role in endoplasmic reticulum quality control and endoplasmic reticulum-associated degradation (ERAD) pathways. This protein functions in the surveillance of both non-glycosylated proteins and glycoproteins, ensuring proper protein folding and facilitating the degradation of misfolded proteins. ERLEC1 is localized to the endoplasmic reticulum lumen, where it participates in maintaining cellular proteostasis through its lectin-mediated recognition capabilities.