Recombinant TOB1 protein (His tag)

Catalog Number	544669
Synonyms	Transducer of erbB-2 1
Species	Human
Expression System	E. coli
Accession	P50616
Molecular Weight	Predictes a molecular mass of 15.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-118
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-118 aa (P50616) 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 Protein Tob1 (Transducer of erbB-2 1) Fragment (residues 1-118) is a high-quality, stable, and soluble protein designed for structural and biochemical studies. This fragment, derived from the human TOB1 gene, retains key characteristics suitable for investigating its anti-proliferative functions and interactions. Protein Tob1 is an anti-proliferative protein that functions by associating with deadenylase subunits of the CCR4-NOT complex, as supported by studies (PubMed:23236473, PubMed:8632892). It plays a role in mediating CPEB3-accelerated mRNA deadenylation by binding to CPEB3 and recruiting CNOT7, leading to target mRNA deadenylation and decay (PubMed:21336257). Subcellularly, Tob1 is localized in both the cytoplasm and nucleus, with a small fraction typically in the cytoplasm except during late S-phase, where more than half of the protein becomes cytoplasmic. This localization underscores its involvement in critical cellular processes related to mRNA regulation and cell proliferation.