

**Synonym**

TAR DNA-binding protein 43

**Source**

Human TDP-43, His Tag(TD3-H5145) is expressed from E. coli cells. It contains AA Met 1 - Met 414 (Accession # [Q13148-1](#)).

Predicted N-terminus: Met

**Molecular Characterization**

Poly-his TDP-43(Met 1 - Met 414)  
Q13148-1

This protein carries a polyhistidine tag at the N-terminus

The protein has a calculated MW of 46.8 kDa. The protein migrates as 54-56 kDa under reducing (R) condition (SDS-PAGE).

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;90% as determined by SDS-PAGE.

**Formulation**

Supplied as 0.2 µm filtered solution in 50 mM HEPES, 500 mM NaCl, 0.4 M Arginine, pH8.0 with glycerol as protectant.

Contact us for customized product form or formulation.

**Shipping**

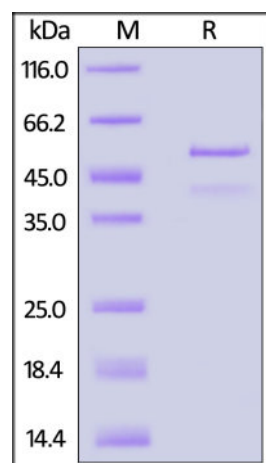
*This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.*

**Storage**

*Please avoid repeated freeze-thaw cycles.*

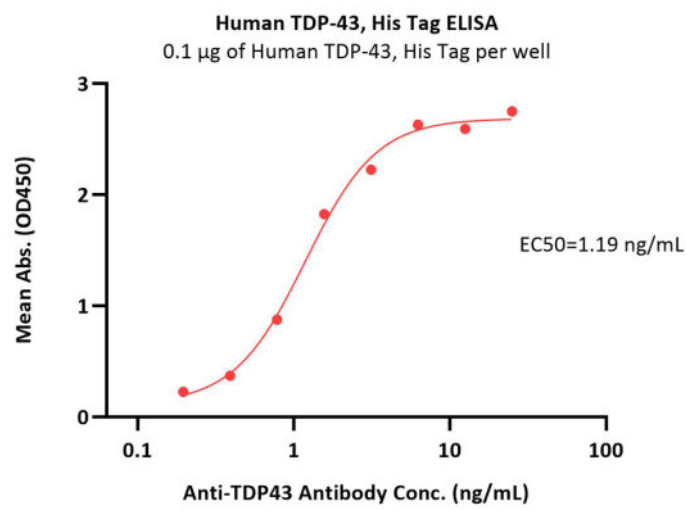
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

**SDS-PAGE**

Human TDP-43, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Human TDP-43, His Tag (Cat. No. TD3-H5145) at 1 µg/mL (100 µL/well) can bind Anti-TDP43 Antibody with a linear range of 0.2-3 ng/mL (QC tested).

### Background

TDP-43, the transactive response (TAR)-D binding Protein with a molecular weight of 43 KDa is encoded by TARDBP gene that located at the chromosome 1. It is a R/D binding protein that structurally resembles a typical hnRNP protein family member. involved in transcriptional regulation and R processing. It is linked to sporadic and familial amyotrophic lateral sclerosis and frontotemporal lobar degeneration. TDP-43 is predominantly nuclear, but it translocates to the cytoplasm under pathological conditions. Cytoplasmic accumulation, phosphorylation, ubiquitination and truncation of TDP-43 are the main hallmarks of TDP-43 proteinopathies.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.