

Product datasheet

Recombinant Human TDP43 protein ab140718

[1 References](#) [1 Image](#)

Description

Product name	Recombinant Human TDP43 protein
Purity	> 85 % SDS-PAGE. ab140718 is purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	<u>Q13148</u>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSMSEY IRVTEDEDE PIEIPSEDDG TVLLSTVTAQ FPGACGLRYR NPVSQCMRGV RLVEGILHAP DAGWGNLVV VNYPKDNKRK MDETDASSAV KVKRAVQKTS DLMVGLPWK TTEQDLKEYF STFGEVLMVQ VKKDLKTGHS KGFVRFTE YETQVKVMSQ RHMIDGRWCD CKLPNSKQSQ DEPLRSRKVF VGRCTEDMTE DELREFFSQY GDVMDVFIPK PFRAFAFVTF ADDQIAQSLC GEDLIKGIS VHISNA
Predicted molecular weight	34 kDa including tags
Amino acids	1 to 260
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab140718** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Mass Spectrometry
Mass spectrometry	MALDI-TOF
Form	Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.32% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

General Info

Function

DNA and RNA-binding protein which regulates transcription and splicing. Involved in the regulation of CFTR splicing. It promotes CFTR exon 9 skipping by binding to the UG repeated motifs in the polymorphic region near the 3'-splice site of this exon. The resulting aberrant splicing is associated with pathological features typical of cystic fibrosis. May also be involved in microRNA biogenesis, apoptosis and cell division. Can repress HIV-1 transcription by binding to the HIV-1 long terminal repeat. Stabilizes the low molecular weight neurofilament (NFL) mRNA through a direct interaction with the 3' UTR.

Tissue specificity

Ubiquitously expressed. In particular, expression is high in pancreas, placenta, lung, genital tract and spleen.

Involvement in disease

Defects in TARDBP are the cause of amyotrophic lateral sclerosis type 10 (ALS10) [MIM:612069]. ALS is a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of ALS is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of the cases.

Sequence similarities

Contains 2 RRM (RNA recognition motif) domains.

Domain

The RRM domains can bind to both DNA and RNA.

Post-translational modifications

Hyperphosphorylated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

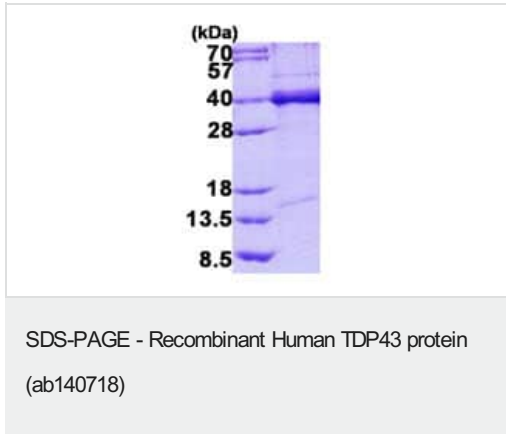
Ubiquitinated in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

Cleaved to generate C-terminal fragments in hippocampus, neocortex, and spinal cord from individuals affected with ALS and FTLDU.

Cellular localization

Nucleus. In patients with frontotemporal lobar degeneration and amyotrophic lateral sclerosis, it is absent from the nucleus of affected neurons but it is the primary component of cytoplasmic ubiquitin-positive inclusion bodies.

Images



15% SDS-PAGE analysis of ab140718 (3 μ g).

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