

Anti-TDP43 Rabbit Monoclonal Antibody

Catalog # ABO16096

Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	Q13148
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-TDP43 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	23435
Other Names	TAR DNA-binding protein 43, TDP-43, TARDBP {ECO:0000303 PubMed:18396105, ECO:0000312 HGNC:HGNC:11571}
Calculated MW	44740
Application Details	WB 1:1000-1:5000 IHC 1:50-1:200 ICC/IF 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names Immunogen	Clone: 26T75 A synthesized peptide derived from TDP43
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	TARDBP {ECO:0000303 PubMed:18396105, ECO:0000312 HGNC:HGNC:11571}
Function	RNA-binding protein that is involved in various steps of RNA biogenesis and

processing (PubMed:[23519609](#)). Preferentially binds, via its two RNA recognition motifs RRM1 and RRM2, to GU-repeats on RNA molecules predominantly localized within long introns and in the 3'UTR of mRNAs (PubMed:[23519609](#), PubMed:[24240615](#), PubMed:[24464995](#)). In turn, regulates the splicing of many non-coding and protein-coding RNAs including proteins involved in neuronal survival, as well as mRNAs that encode proteins relevant for neurodegenerative diseases (PubMed:[21358640](#), PubMed:[29438978](#)). Plays a role in maintaining mitochondrial homeostasis by regulating the processing of mitochondrial transcripts (PubMed:[28794432](#)). Also regulates mRNA stability by recruiting CNOT7/CAF1 deadenylase on mRNA 3'UTR leading to poly(A) tail deadenylation and thus shortening (PubMed:[30520513](#)). In response to oxidative insult, associates with stalled ribosomes localized to stress granules (SGs) and contributes to cell survival (PubMed:[19765185](#), PubMed:[23398327](#)). Also participates in the normal skeletal muscle formation and regeneration, forming cytoplasmic myo-granules and binding mRNAs that encode sarcomeric proteins (PubMed:[30464263](#)). Plays a role in the maintenance of the circadian clock periodicity via stabilization of the CRY1 and CRY2 proteins in a FBXL3-dependent manner (PubMed:[27123980](#)). Negatively regulates the expression of CDK6 (PubMed:[19760257](#)). Regulates the expression of HDAC6, ATG7 and VCP in a PPIA/CYPA-dependent manner (PubMed:[25678563](#)).

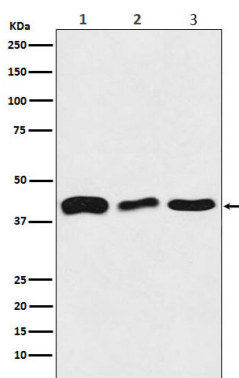
Cellular Location

Nucleus. Cytoplasm. Cytoplasm, Stress granule Mitochondrion.
Note=Continuously travels in and out of the nucleus (PubMed:18957508). Localizes to stress granules in response to oxidative stress (PubMed:19765185). A small subset localizes in mitochondria (PubMed:28794432).

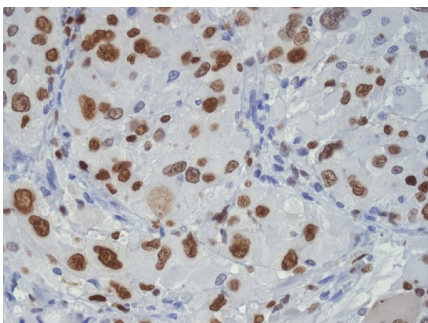
Tissue Location

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

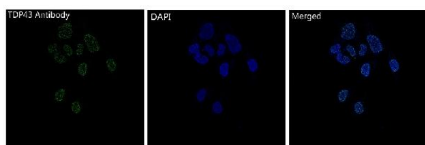
Images



Western blot analysis of TDP43 expression in (1) HeLa cell lysate; (2) Mouse brain lysate; (3) Rat brain lysate.



Immunohistochemical analysis of paraffin-embedded human glioma, using TDP43 Antibody.



Immunofluorescent analysis of HeLa cells, using TDP43 Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.