

#3448 Store at -20C

TDP43 (G400) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC	H M R	Endogenous	45	Rabbit	#Q13148	23435

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

TDP43 (G400) Antibody detects endogenous levels of total TDP43 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly400 of human TDP43. Antibodies are purified by protein A and peptide affinity chromatography.

Background

TDP43 (TAR DNA-binding protein 43) is involved in transcriptional regulation and exon splicing (1,2). While normal TDP43 is a nuclear protein, pathological TDP43 is a component of insoluble aggregates in patients with frontotemporal lobar degeneration (FTLD) and amyotrophic lateral sclerosis (ALS). In these disorders, TDP43 is abnormally ubiquitinated, phosphorylated, and cleaved to generate carboxy-terminal fragments that are sequestered as insoluble aggregates in neuronal nuclei, perikarya, and neurites (3,4). Additionally, TDP43 inhibits the expression of the *HIV-1* gene and regulates *CFTR* gene splicing (1,5).

Background References

1. Ou, S.H. et al. (1995) *J Virol* 69, 3584-96.
2. Winton, M.J. et al. (2008) *J Biol Chem* 283, 13302-9.
3. Neumann, M. et al. (2006) *Science* 314, 130-3.
4. Cairns, N.J. et al. (2007) *Am J Pathol* 171, 227-40.
5. Buratti, E. and Baralle, F.E. (2001) *J Biol Chem* 276, 36337-43.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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