

Ordering Information

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HGNC name: TAF15

RRID: [AB_2572388](https://identifiers.org/AB_2572388)

Immunogen: Full length recombinant human TAF15 expressed in and purified from *E. coli*.

Format: Purified antibody at 1mg/mL in 50% PBS, 50% glycerol plus 5mM NaN₃

Storage: MCA Shipped on ice. Stable at 4°C for one year, for longer term store at -20°C

Recommended dilutions:

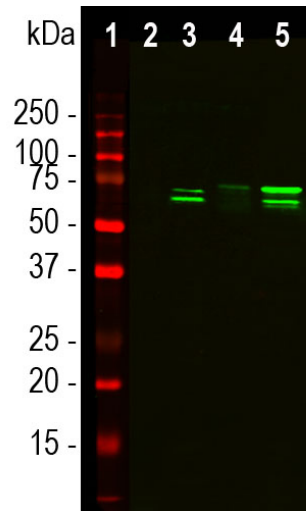
Western blot: 1:1,000.

ICC/IF and IHC: 1:500-1:1,000

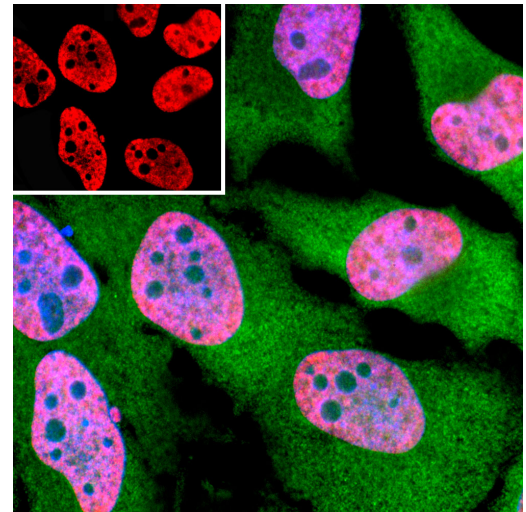
References:

- Morohoshi F, Arai K, Takahashi EI, Tanigami A, Ohki M. Cloning and mapping of a human RBP56 gene encoding a putative RNA binding protein similar to FUS/TLS and EWS proteins. *Genomics* 1996 38:51-7 (1996).
- Andersson MK, Ståhlberg A, Arvidsson Y, Olofsson A, Semb H, Stenman G, Nilsson O, Aman P. The multifunctional FUS, EWS and TAF15 proto-oncoproteins show cell type-specific expression patterns and involvement in cell spreading and stress response. *BMC Cell Biol.* 11:9:37 (2008).
- Ticozzi N, Vance C, Leclerc AL, Keagle P, Glass JD, McKenna-Yasek D, Sapp PC, Silani V, Bosco DA, Shaw CE, Brown RH Jr, Landers JE. Mutational analysis reveals the FUS homolog TAF15 as a candidate gene for familial amyotrophic lateral sclerosis. *Am J Med Genet B Neuropsychiatr Genet.* [Epub ahead of print] (2011).
- Da Cruz S, Cleveland DW. Understanding the role of TDP-43 and FUS/TLS in ALS and beyond. *Curr Opin*

Applications	Host	Isotype	Molecular Wt.	Species Cross-Reactivity
Western blot, ICC/IF, IHC	Mouse	IgG1	68kDa by SDS-PAGE	Hu, Rt, Ms



Western blot analysis of cytosol or nuclear enriched fractions of cell line lysates using mouse mAb to TAF15, MCA-4D71, dilution 1:1,000: [1] protein standard, [2] NIH-3T3 cytosol, [3] NIH-3T3 nuclear fraction, [4] HeLa cytosol, and [5] HeLa nuclear fraction. Double band at 56-68kDa detected predominantly in the nuclear enriched fraction corresponds to the TAF15 protein.



Immunofluorescent analysis of HeLa cells stained with mouse mAb to TATA-box binding protein associated factor 15, TAF15, MCA-4D71, dilution 1:500 in red, and costained with rabbit pAb to GAPDH, RPCA-GAPDH, dilution 1:1,000 in green. Blue is DAPI staining of nuclear DNA. The MCA-4D71 antibody reveals TAF15 protein expressed exclusively in the nuclei of the cells, while GAPDH antibody produces strong cytoplasmic staining.

Background: TAF15 is a member of a family of 3 closely related mammalian RNA binding proteins, the other members being FUS/TLS and EWSR1. TDP43 is a more distant relative of these three. The protein is also known as RBP56, for RNA binding protein 56kDa (1). The Human Genome Organization (HUGO) Gene Nomenclature Committee (HGNC) name for this protein is TAF15. As with the other members of this family, TAF15 contains one copy of the ~90 amino acid RRM domain. RRM is an acronym for RNA Recognition Motif, and this domain is found in many proteins which bind single stranded RNA and DNA. It also has a single Zinc Finger domain of the ZnF_RBZ subtype found in Ran binding proteins. Ran is a small G protein related to p21-Ras which regulates the import and export of proteins to the nucleus.

Like TDP43, Fus/TLS and EWS, TAF15 is widely expressed in tissues and is localized primarily in the nucleus of cells (2). It was recently shown that point mutations in TAF15 may be associated with some familial forms of Lou Gehrig's disease, also known as amyotrophic lateral sclerosis or ALS (3). Fus/TLS and TDP43 protein mutations and aggregation have been implicated in various kinds of neurological disease including ALS (4).

MCA-4D71 was generated against full length recombinant human TAF15 expressed in and purified from *E. coli*. MCA-4D71 recognizes TAF15 specifically both in western blots and in immunocytochemical experiments. On blots MCA-4D71 reveals a prominent 68 kDa band, and on cells in tissue culture the antibody stains mainly in nucleus. For our antibody to TDP43, see MCA-3H8. The HGNC name for this protein is TAF15.

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Abbreviation Key:

mAb—Monoclonal Antibody pAb—Polyclonal Antibody WB—Western Blot IF—Immunofluorescence ICC—Immunocytochemistry IHC—Immunohistochemistry E—ELISA Hu—Human Mo—Monkey Do—Dog Rt—Rat Ms—Mouse Bo—Cow Po—Pig Ho—Horse Ch—Chicken Dr—*D. rerio* Dm—*D. melanogaster* Ce—*C. elegans* Sc—*S. cerevisiae* Sa—*S. aureus* Ec—*E. coli*.