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| <b>Cat. No:</b>          | MAB-94326  |
| <b>Conjugate:</b>        | Unconjugated   |
| <b>Size:</b>             | 100 ug   |
| <b>Clone:</b>            | 3H8  |
| <b>Concentration:</b>    | 1mg/ml   |
| <b>Host:</b>             | Mouse  |
| <b>Isotype:</b>          | IgG1   |
| <b>Immunogen:</b>        | Full length recombinant human TDP43 expressed in and purified from E. coli.                                  |
| <b>Reactivity:</b>       | Human, Mouse, Rat, Cow, Pig  |
| <b>Applications:</b>     | Western Blot: 1:5,000. Immunocytochemistry:1:1,000 Immunofluorescence: 1:1,000 Immunohistochemistry: 1:1,000 |
| <b>Molecular Weight:</b> | 43kDa  |
| <b>Purification:</b>     | Purified   |
| <b>Synonyms:</b>         | ALS10;TDP-43;TARDBP;TDP43  |

**Background:** TDP43 was originally identified as a protein which binds to the “transactivation response” (TAR) sequence found in the long terminal repeat of the HIV-1 virus genome. UV cross-linking of HeLa cell extract revealed a 43kDa protein which was cloned and sequenced and shown to contain a two copies 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 some which bind single stranded 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. The protein is frequently referred to by the acronym TDP43 corresponds to “TAR DNA binding protein of molecular weight 43 kDa”. Northern blots showed that the protein is ubiquitous in tissue expression. Much interest has been focused on TDP43 recently due to its association with the inclusions seen in frontotemporal lobar degeneration and Amyotrophic Lateral Sclerosis (ALS). The protein is present in these inclusions in a partially degraded, hyperphosphorylated and ubiquitinated form.

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| <b>Form:</b>    | Liquid   |
| <b>Buffer:</b>  | 50% PBS, 50% glycerol plus 5mM NaN3                    |
| <b>Storage:</b> | Store at 4°C for short term, for longer term at -20°C. |

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