

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects human TDP-43/TARDBP in direct ELISAs. Detects human, mouse, and rat TDP-43/TARDBP in Western blots.                                                                                                                                                                 |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 982022                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human TDP-43/TARDBP<br>Met1-Thr103<br>Accession # Q13148                                                                                                                                                                                |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

TDP-43 (TAR DNA binding protein of 43 kDa; gene name TARDBP) is a 414 amino acid (aa) nuclear RNA/DNA binding phosphoprotein that regulates transcription and splicing. TDP-43 is aberrantly expressed in most forms of amyotrophic lateral sclerosis and frontotemporal lobar degeneration. In these cases it is absent from the nucleus and accumulates, along with a truncated 20-28 kDa form, in ubiquitin-containing inclusion bodies. TDP-43 can also influence CFTR exon 9 skipping in cystic fibrosis. Within aa 1-103, human and mouse TDP-43 share 100% aa sequence identity, and 99% aa identity with rat TDP-43.

#### PRODUCT SPECIFIC NOTICES

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