

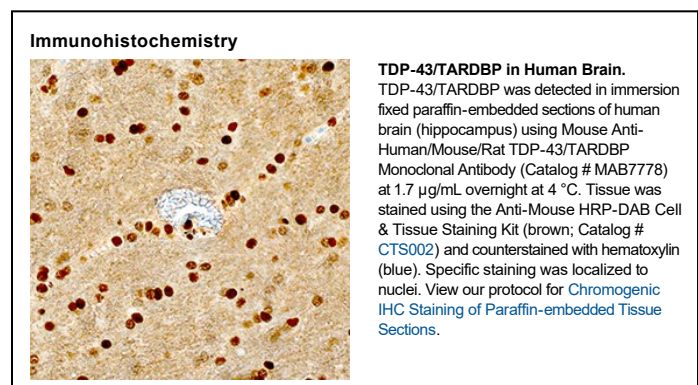
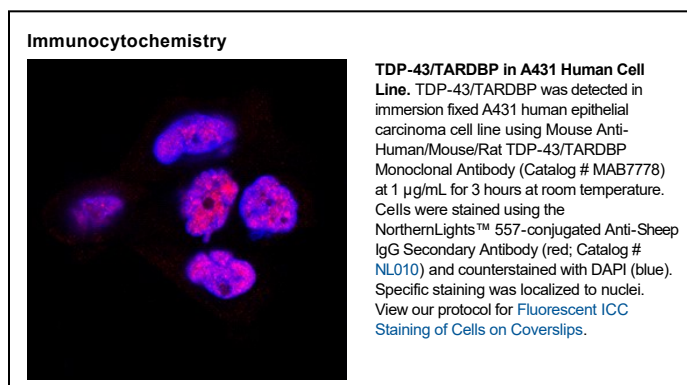
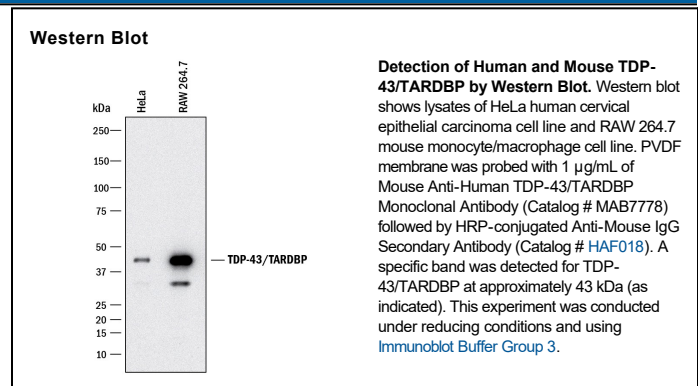
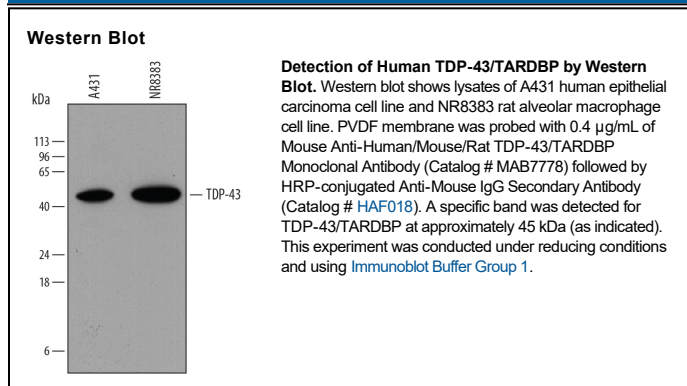
DESCRIPTION	
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human TDP-43/TARDBP in direct ELISAs. Detects human, mouse, and rat TDP-43/TARDBP in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 671834
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TDP-43/TARDBP Met1-Thr103 Accession # Q13148
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

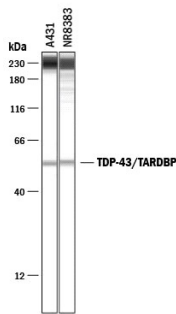
**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.4-1 µg/mL	See Below
<b>Immunocytochemistry</b>	1-25 µg/mL	See Below
<b>Immunohistochemistry</b>	1-10 µg/mL	See Below
<b>Simple Western</b>	5 µg/mL	See Below

## DATA



## Simple Western



**Detection of Human and Rat TDP-43/TARDBP by Simple Western™.** Simple Western lane view shows lysates of A431 human epithelial carcinoma cell line and NR8383 rat alveolar macrophage cell line, loaded at 0.2 mg/mL. A specific band was detected for TDP-43/TARDBP at approximately 54 kDa (as indicated) using 5 µg/mL of Mouse Anti-Human TDP-43/TARDBP Monoclonal Antibody (Catalog # MAB7778). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.