

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse TDRD1 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant human TDRD1 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 739206
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse TDRD1 Asn831-Lys960 Accession # Q99MV1
<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 as a 0.2 µm filtered solution in PBS.

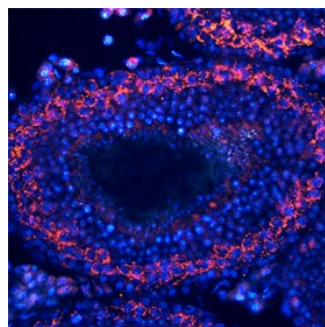
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



**TDRD1 in Mouse Testis.** TDRD1 was detected in perfusion fixed frozen sections of mouse testis using Rat Anti-Mouse TDRD1 Monoclonal Antibody (Catalog # MAB6296) at 25 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to spermatogonia. View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

## 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

TDRD1 (Tudor domain containing protein 1; also MTR-1) is a 130-145 kDa member of the Tudor family of proteins. It is expressed in spermatocytes and spermatids, and forms part of an RNA-silencing complex that regulates gene expression. TDRD1, through its Tudor and MYND domains, binds methylated PIWI (P-element-induced wimpy testis) protein and PIWI-interacting RNA loading factor, respectively. This serves to promote the recruitment of germline-specific small RNAs into a PIWI ribonucleoprotein complex. Mouse TDRD1 is 1172 aa in length. It contains one MYND-type Zn finger region (aa 163-199), and four methyl-binding Tudor domains (aa 307-1032). Over aa 831-960, mouse TDRD1 shares 96% and 66% aa identity with rat and human TDRD1, respectively.