

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TDRKH in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human TDRD1 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 686213
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TDRKH His206-Leu561 Accession # Q9Y2W6
<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.

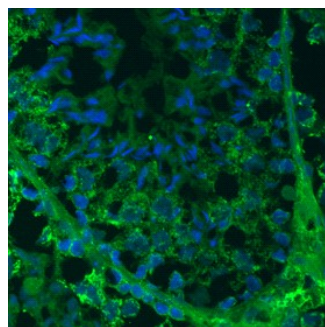
## APPLICATIONS

**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.

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

## DATA

### Immunohistochemistry



**TDRKH in Adult Mouse Testis.** TDRKH was detected in immersion fixed frozen sections of adult mouse testis using Mouse Anti-Human TDRKH Monoclonal Antibody (Catalog # MAB6286) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 493-conjugated Anti-Mouse IgG Secondary Antibody (green; Catalog # NL009) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm of germ cells. View our protocol for [Chromogenic 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

TDRKH (Tudor domain and KH domain containing protein; also TDRD2) is a 70 kDa member of the Tudor family of proteins. It is expressed in developing spermatogonia and meiotic primary spermatocytes, but not embryonic stem cells. TDRKH forms part of an RNA-silencing complex that safeguards the germ cell genome. Through its 60 amino acid (aa) Tudor domain, it binds methylated PIWI (P-element-induced wimpy testis) protein and serves to position PIWI for noncoding RNA binding. Human TDRKH is 606 aa in length. It contains two RNA recognition KH domains (aa 52-115 and 124-190), and one methyl-binding Tudor domain (aa 353-412). There are four potential splice forms. Three possess a shared deletion of aa 562-606, with two of these also showing a unique deletion of aa 108-152 and 76-79, respectively; a fourth shows a two aa substitution for aa 559-606. Over aa 206-561, human TDRKH shares 87% aa identity with mouse TDRKH.