

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                  |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human TDRKH in direct ELISAs and Western blots.                                |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                   |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                              |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human TDRKH<br>His206-Leu561<br>Accession # Q9Y2W6 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm    |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                           |
| *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>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

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 non-coding 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.

#### PRODUCT SPECIFIC NOTICES

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