

## DESCRIPTION

|                           |  |
|---------------------------|--|
| <b>Species Reactivity</b> | Mouse  |
| <b>Specificity</b>        | Detects mouse Testican 3/SPOCK3 in ELISAs and Western blots. In sandwich immunoassays, less than 0.3% cross-reactivity with recombinant human (rh) Testican 1 and rhTestican2 is observed. |
| <b>Source</b>             | Polyclonal Goat IgG  |
| <b>Purification</b>       | Antigen Affinity-purified  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Testican 3/SPOCK3<br>Ala26-Ile436<br>Accession # Q8BKV0  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.   |

## 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>                                | 0.1 µg/mL                 | Recombinant Mouse Testican 3/SPOCK3 (Catalog # 2346-PI)  |
| <b>Mouse Testican 3/SPOCK Sandwich Immunoassay</b> |                           | <b>Reagent</b>   |
| <b>ELISA Capture</b>                               | 2-8 µg/mL                 | Mouse Testican 3/SPOCK3 Antibody (Catalog # MAB2346)   |
| <b>ELISA Detection Standard</b>                    | 0.1-0.4 µg/mL             | Mouse Testican 3/SPOCK3 Biotinylated Antibody (Catalog # BAF2346)<br>Recombinant Mouse Testican 3/SPOCK3 (Catalog # 2346-PI) |

## PREPARATION AND STORAGE

|                                |   |
|--------------------------------|---|
| <b>Reconstitution</b>          | Reconstitute at 0.2 mg/mL in sterile PBS.   |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.   |
| <b>Stability &amp; Storage</b> | <p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

Testican 3 encoded by the SPOCK3 gene is a proteoglycan expressed in brain (1). The human and mouse cDNAs predict 90% identity between the deduced amino acid sequences from the two species, indicating a conserved function (2, 3). Only the human protein, but not the mouse protein, has been characterized in the literature. Testican 3 contains Ca<sup>2+</sup>-binding domain and the C-terminal acidic domain with putative glycosaminoglycan attachment sites. In addition, it contains three potential inhibitory domains targeted toward three different classes of proteases, metallo, cysteine and serine proteases. The N-terminal region, which is unique to testicans, is responsible for the inhibition of Testican 3 towards MMP-14 (MT1-MMP, a metalloprotease) activation of MMP-2 (1). The thyropro domain and the follistatin-like domain with a six cysteine Kazal-like motif may inhibit cysteine and serine proteases, respectively (4). A spliced variant designated as N-Tes contains the N-terminal unique region, the follistatin-like domain and the Ca<sup>2+</sup>-binding domain, but lacks the C-terminal thyropro domain and the acidic domain (1). The purified rmTestican 3 is capable of inhibiting rhMMP-14 and rhCathepsin L (R&D Systems, Catalog # 918-MP and 952-CY) in assays using the fluorogenic peptide substrates (R&D Systems, Catalog # ES001 and ES008). As compared to rhTestican 1 (R&D Systems, Catalog # 2327-PI), the IC<sub>50</sub> of rmTestican 3 is weaker toward rhCathepsin L and rhMMP-14 activity.

## References:

1. Nakada, M. *et al.* (2001) *Cancer Res.* **61**:8896.
2. Strausberg, R.L. *et al.* (2002) *Proc. Natl. Acad. Sci. USA* **99**:16899.
3. Okazaki, Y. *et al.* (2002) *Nature* **420**:563.
4. Alliel, P.M. *et al.* (1993) *Eur. J. Biochem.* **214**:347.