

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Testican 3/SPOCK3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 60% cross-reactivity with recombinant human (rh) Testican 3 is observed, less than 5% cross-reactivity with rhTestican 1 is observed, and less than 1% cross-reactivity with rhTestican 2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Testican 3/SPOCK3 Ala26-Ile436 Accession # Q8BKV0
Formulation	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
Western Blot	0.1 µg/mL	Recombinant Mouse Testican 3/SPOCK3 (Catalog # 2346-PI)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Testican 3/SPOCK3 (Catalog # 2346-PI), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 Ca²⁺-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 thyroprin 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 Ca²⁺-binding domain, but lacks the C-terminal thyroprin 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 IC₅₀ 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.