

Qty: 100 μg/200 μL Mouse anti-Thrombospondin 1 **Catalog No.** 39-9300 Lot No.

Mouse anti-Thrombospondin 1

FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: A6.1

ISOTYPE: Mouse IgG1-kappa

IMMUNOGEN

Full-length purified human, mouse, and rat thrombospondin 1 derived from the supernatant of thrombin-activated platelets

SPECIFICITY

This antibody is specific for the collagen type V-binding domain^(1,2) of the thrombospondin 1 (TSP1, THBS1) protein. On Western blots of a recombinant fragment of TSP1, it identifies the target band at ~140 kDa.

REACTIVITY

Reactivity has been confirmed with recombinant TSP1 protein by Western blotting⁽³⁾ and with frozen human synovial⁽⁴⁾ and transitional cell carcinoma⁽⁵⁾ tissues by immunohistochemistry. Clone A6.1 has been shown to block polymorphonuclear leukocyte (PMN) adherence to TSP1.⁽⁶⁾ Based on amino acid sequence identity, reactivity with mouse and rat is also expected.

Sample	ELISA	Immuno- histochemistry (frozen)	Western Blotting	Adhesion Inhibition
Human	ND	++ ^(4,5)	+++ ⁽³⁾	++ ⁽⁶⁾
Mouse	ND	ND	ND	ND
Rat	ND	ND	ND	ND
Immunogen	+++ ⁽³⁾	ND	ND	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA ⁽³⁾ :	0.1-1.0 µg/ml
Immunohistochemistry (frozen) ^(4,5) :	1-5 µg/mL
Western Blotting ⁽³⁾ :	1-2 µg/mL
Adhesion Inhibition ⁽⁶⁾ :	3-10 µg/mL

STORAGE

PI399300

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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BACKGROUND

Thrombospondin I (TSP1, THBS1) is a multimodular secreted protein that associates with the extracellular matrix and possesses a variety of biologic functions, including a potent angiogenic activity. TSP1 is a subunit of a disulfide-linked homotrimeric protein, and can bind to fibrinogen, fibronectin, laminin, type V collagen and integrins alpha-V/beta-1. TSP1 protein has been shown to play roles in platelet aggregation, angiogenesis, and tumorigenesis.⁴

REFERENCES

- 1. Dixit VM, et al. J Biol Chem 261(4):1962-1968, 1986.
- 2. Galvin NJ, et al. *J Cell Biol* 104(5):1413-1422, 1987.
- 3. Smirnova IV & Festoff BW. J Neur Sci 127:207-213, 1994.
- 4. Koch AE, et al. Pathobiol 61(1):1-6, 1993.
- 5. Shi S-R, et al. J Histochem Cytochem 47(4):463-469, 1999.
- 6. Suchard SJ, et al. J Immunology 146 (11):3945-3952, 1991.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Су™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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