

Peninsula Laboratories, LLC A Member of the Bachem Group

305 Old County Road, San Carlos, CA 94070 Tel: (800) 922-1516 • (650) 592-5392 Fax: (650) 595-4071 www.bachem.com

Monoclonal Antibody to Human Thromboxane Synthase

Monoclonal antibody Tü 300 is a useful marker for the detection of native thromboxane synthase in smears, isolated cells, human tissue sections, and for affinity purification of the enzyme. In combination with the markers for MRP8/14 (product T-1023), CD163 (product T-1060) and the macrophage marker 25F9 (product T-1016), Tü-300 enables a more precise characterization of inflammatory processes in injured tissues, or *in vitro* cell-cell interaction studies.

Product Number:	T-1202
Clone:	Tü-300
Host species, isotype:	Mouse IgG2a
Quantity:	200µg
Format:	Affinity purified, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% thimerosal as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C
	Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC); has been reported to work in ELISA.
	Approximate working dilution for IHC: Frozen sections: 2μg/ml (1:200) Paraffin sections: not tested.
	Optimal dilutions should be determined by the end user.
	Suggested positive control: Human liver, tonsil.
Immunogen:	Purified human platelet thromboxane synthase.
Antigen, epitope:	The antigen has a molecular weight of 58kDa, epitope not further characterized.



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Antigen distribution:

Isolated cells: thrombocytes, monocytes.

Tissue sections: Thromboxane synthase is predominantly produced by macrophages or antigen presenting cells of the myelo-monocytic lineage as shown below. Endothelial cells of placenta and epithelial cells in tonsils and bronchi also express this enzyme.

Distribution of thromboxane synthase in human tissues

Tissue	Immunostained cells	
Tonsils Spleen Thymus Lung Bronchi Liver Kidney Skin Small intestine Connective tissue Placenta Umbilical cord Uterus	Macrophages; Crypt epithelium Macrophages; Dendritic cells Macrophages; Dendritic cells Alveolar macrophages Monocytic cells; Bronchial Epithelium Kupffer cells Monocytic cells; Mesangial cells Langerhans cells Macrophages Histiocytes Hofbauer cells; Endothelial cells Dendritic cells Dendritic cells	

from Nuesing et al. 1990

Specificity:

Human: positive.

Other species: negative in rat.

Selected references

Nuesing, R. et al.: Production and Characterization of Polyclonal and Monoclonal Antibodies Against Human Thromboxane Synthase. Blood: <u>76(1)</u>, 80-85 (1990).

Nuesing, R. et al.: Immunohistochemical localization of thromboxane synthase in human tissues. Eicosanoids: <u>3</u>, 53-58 (1990).

Nuesing, R. & Ullrich, V.: Immunoquantitation of thromboxane synthase in human tissues. Eicosanoids: <u>3</u>, 175-180 (1990).

Nuesing, R. et al.: Immunoaffinity Purification of Human Thromboxane Synthase. Arch.Biochem.Biophys.: <u>280(2)</u>, 325-330 (1990).

For in vitro research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.