

Mouse Anti-Thrombomodulin (CD141) [D3]: MC0974, MC0974RTU7

Intended Use: For Research Use Only

Description: Thrombomodulin (TM), also known as CD141, is an endothelial-specific type I membrane receptor that binds thrombin, resulting in the activation of protein C. This causes the degradation of clotting factors Va and VIIIa and reduces the amount of thrombin generated. Defect in Thrombomodulin is a cause of thromboembolic disease, also known as inherited thrombophilia. Thrombomodulin was initially identified in endothelial cells. Its expression was also found in extra-vascular sites, such as in syncytiotrophoblasts in the placenta, epithelial tissues in the gingiva, in skin and in the synovial lining cells. In tumors, Thrombomodulin is expressed in vascular tumors and squamous cell carcinoma in a variety of tissues, including oral mucosa, esophagus and skin. Thrombomodulin is a marker for angiosarcoma. Additionally, anti-Thrombomodulin is useful in differentiating mesothelioma (positive) from lung adenocarcinoma (negative).

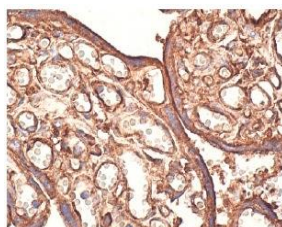
Specifications

Clone:	D3
Source:	Mouse
Isotype:	IgG2a
Reactivity:	Human
Immunogen:	Amino acids 22-321 of human TM
Localization:	Cytoplasm, membrane
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC Flow Cyt., IP, WB
Package:	

Description	Catalog No.	Size
Thrombomodulin (CD141) Concentrated	MC0974	1 ml
Thrombomodulin (CD141) Prediluted	MC0974RTU7	7 ml

IHC Procedure

Positive Control Tissue:	Vascular tissue, angiosarcoma
Concentrated Dilution:	50-250
Pretreatment:	Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual
* Result should be confirmed by an established diagnostic procedure.	



FFPE human placenta stained with anti-TM using DAB

References:

1. Thrombomodulin promotes corneal epithelial wound healing. Huang, YH., et al. PloS one. 10: e0122491, 2015.
2. Integrin αvβ5 in endothelial cells of rat splenic sinus: an immunohistochemical and ultrastructural study. Uehara, K., et al. Cell Tissue Res. 356: 183-93, 2014.
3. Regulatory sequences of the porcine THBD gene facilitate endothelial-specific expression of bioactive human thrombomodulin in single- and multitransgenic pigs. Wuensch, A., et al. Transplantation. 97: 138-47, 2014.
4. Thrombomodulin mediates the progression of epithelial ovarian cancer cells. Chen, L.M., et al. Tumour biology : the journal of the International Society for Oncodevelopmental Biology and Medicine. 34: 3743-51, 2013.

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