

Mouse Anti-Thrombomodulin (CD141) [MD306]: 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).

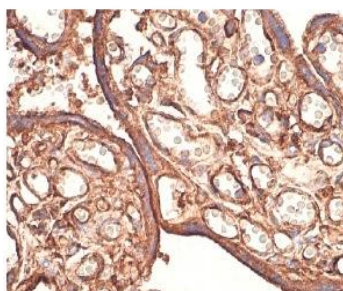
Specifications

Clone: MD306
 Source: Mouse
 Isotype: IgG2a
 Reactivity: Human
 Immunogen: Fragment of human Thrombomodulin protein
 Localization: Membrane and some cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC
 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: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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.