

Datasheet: MCA641

| Description:  | MOUSE ANTI HUMAN CD141 |  |  |
|---------------|------------------------|--|--|
| Specificity:  | CD141                  |  |  |
| Other names:  | THROMBOMODULIN         |  |  |
| Format:       | S/N                    |  |  |
| Product Type: | Monoclonal Antibody    |  |  |
| Clone:        | QBEND/40               |  |  |
| Isotype:      | lgG2a                  |  |  |
| Quantity:     | 1 ml                   |  |  |
|               |                        |  |  |

## **Product Details**

### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                                | Yes | No | Not Determined | <b>Suggested Dilution</b> |
|--------------------------------|-----|----|----------------|---------------------------|
| Flow Cytometry                 | -   |    |                | Neat                      |
| Immunohistology - Frozen       | •   |    |                | 1/10 - 1/100              |
| Immunohistology - Paraffin (1) | •   |    |                | 1/10 - 1/50               |
| ELISA                          |     |    | •              |                           |
| Immunoprecipitation            |     |    | •              |                           |
| Western Blotting               |     |    | •              |                           |

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

| Target Species              | Human  |
|-----------------------------|--|
| Species Cross<br>Reactivity | Reacts with: Rabbit  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. |
| Product Form                | Tissue Culture Supernatant - liquid  |

| Preparation                          | Tissue Culture Supernatant containing 0.2M Tris/HCl pH7.4 and 5-10% foetal calf serum  |  |
|--------------------------------------|--|--|
| Preservative<br>Stabilisers          | 0.1% Sodium Azide  |  |
| Immunogen                            | Human endothelium derived thrombomodulin.  |  |
| External Database<br>Links           | UniProt: P07204 Related reagents   |  |
|                                      | Entrez Gene:  7056 THBD Related reagents   |  |
| Synonyms                             | THRM   |  |
| RRID                                 | AB_2287220   |  |
| Specificity                          | Mouse anti Human CD141 antibody, clone QBEND/40 recognizes human CD141, also known as thrombomodulin. Mouse anti Human CD141 antibody, clone QBEND/40 all human endothelium tested, but does not inhibit thrombomodulin dependent activation of protein C.   |  |
| Flow Cytometry                       | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.  |  |
| Histology Positive<br>Control Tissue | Lymph node   |  |
| References                           | <ol> <li>Drake, B.L. &amp; Loke, Y.W. (1991) Isolation of endothelial cells from human first trimester decidua using immunomagnetic beads. Hum Reprod. 6 (8): 1156-9.</li> <li>Xu, Y. et al. (2010) Adenovirus-mediated overexpression of glutathione-s-transferase mitigates transplant arteriosclerosis in rabbit carotid allografts. Transplantation. 89:409-16.</li> <li>Monsinjon, T. et al. (2003) Regulation by complement C3a and C5a anaphylatoxins of cytokine production in human umbilical vein endothelial cells. FASEB J. 17: 1003-14.</li> <li>Yockman, J.W. et al. (2009) Polymeric gene delivery of ischemia-inducible VEGF significantly attenuates infarct size and apoptosis following myocardial infarct. Gene Ther. 16: 127-35.</li> <li>Holmén, C. et al. (2005) Heterogeneity of human nasal vascular and sinusoidal endothelial cells from the inferior turbinate. Am J Respir Cell Mol Biol. 32: 18-27.</li> <li>Yamada, A. et al. (2012) Acute regeneration and chronic acellular transformation of rabbit cryopreserved aortic allografts. Acta Histochem Cytochem. 45: 177-86.</li> <li>Kaija, H. et al. (2014) Changes in cardiac thrombomodulin and heat shock transcription factor 1 expression and peripheral thrombomodulin and catecholamines during hypothermia in rats. Stress. 17: 504-11.</li> <li>Chu, C.C. et al. (2012) Resident CD141 (BDCA3)+ dendritic cells in human skin produce IL-10 and induce regulatory T cells that suppress skin inflammation. J Exp Med. 209: 935-45.</li> <li>Kaija, H.M. et al. (2012) Stress-specific responses of p21 expression: implication of transcript variant p21 alt-a in long-term hypoxia. J Cell Biochem. 113: 544-52.</li> </ol> |  |

10. Pakanen, L. *et al.* (2015) Victims of lethal hypothermia have decreased levels of thrombomodulin in myocardium and urine. <u>Int J Legal Med. 129 (2): 289-96.</u>
11. Jonigk, D. *et al.* (2011) Plexiform lesions in pulmonary arterial hypertension composition, architecture, and microenvironment. <u>Am J Pathol. 179 (1): 167-79.</u>

**Storage** 

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

# Related Products

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) <u>HRP</u>

Rabbit Anti Mouse IgG (STAR12...) RPE

Rabbit Anti Mouse IgG (STAR8...) <u>DyLight®800</u>

Goat Anti Mouse IgG (STAR76...)

Human Anti Mouse IgG2a (HCA037...)

HRP

Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

<u>DyLight®650</u>, <u>DyLight®680</u>, <u>DyLight®800</u>,

FITC, HRP

#### **Recommended Negative Controls**

#### MOUSE IgG2a NEGATIVE CONTROL (MCA929)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M394944:220222'

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