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#43514

# CD141/Thrombomodulin (E7Y9P) XP® Rabbit mAb



**Support:** +1-978-867-2388 (U.S.)  
www.cellsignal.com/support

**Orders:** 877-616-2355 (U.S.)  
orders@cellsignal.com

**Entrez-Gene ID** #7056  
**UniProt ID** #P07204

New 02/19

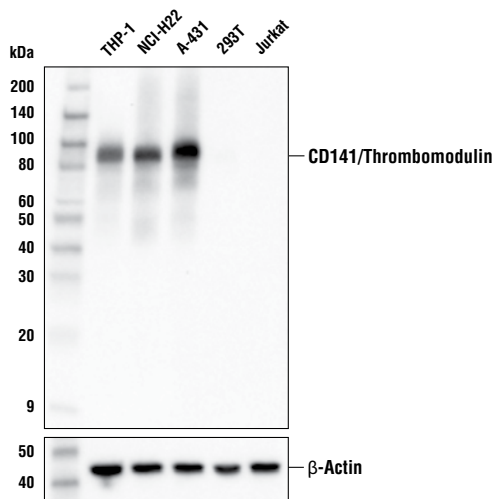
**For Research Use Only. Not For Use In Diagnostic Procedures.**

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IHC-P Endogenous	H	90 kDa	Rabbit IgG**

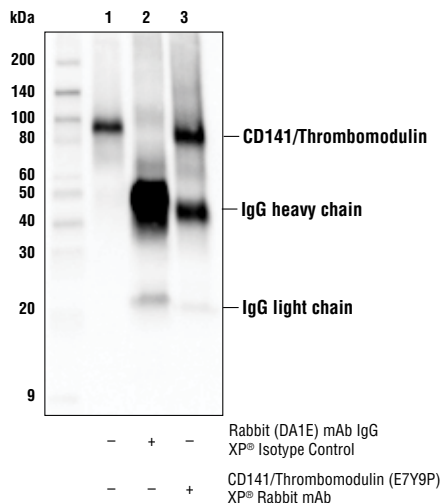
**Background:** CD141/Thrombomodulin (TM, THBD, BDCA-3) is an integral membrane protein expressed on the surface of endothelial cells (1). Acting as a cofactor with Thrombin, CD141/Thrombomodulin activates and initiates the Protein C anticoagulant pathway (1-2). CD141/Thrombomodulin is expressed by a small subset of human CD11c+ myeloid dendritic cells (3-4). These CD141+XCR1+ dendritic cells cross-present antigens to naïve CD8+ T cells, priming them to become activated cytotoxic CD8+ T cells (3-5).

**Specificity/Sensitivity:** Thrombomodulin (E7Y9P) XP® Rabbit mAb recognizes endogenous levels of total CD141/Thrombomodulin protein.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with human CD141/Thrombomodulin recombinant protein.



Western blot analysis of extracts from various cell lines using CD141/Thrombomodulin (E7Y9P) XP® Rabbit mAb (upper) or β-Actin (D6A8) Rabbit mAb #8457 (lower).



Immunoprecipitation of CD141/Thrombomodulin from THP-1 cell extracts. Lane 1 is 10% input, lane 2 is Rabbit (DA1E) mAb IgG XP® Isotype Control #3900, and lane 3 is CD141/Thrombomodulin (E7Y9P) XP® Rabbit mAb. Western blot analysis was performed using CD141/Thrombomodulin (E7Y9P) XP® Rabbit mAb as the primary antibody and Anti-rabbit IgG, HRP-linked Antibody #7074 as the secondary antibody.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.**

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

#### Recommended Antibody Dilutions:

Western blotting 1:1000

Immunoprecipitation 1:200

Immunohistochemistry (Paraffin) 1:200-1:800  
Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.

Unmasking buffer: SignalStain® Citrate Unmasking Solution (10X) #14746

Antibody diluent: SignalStain® Antibody Diluent #8112  
Detection reagent: SignalStain® Boost (HRP, Rabbit) #8114

Immunohistochemistry (Leica® BOND™) 1:100-1:400

For product specific protocols and a complete listing of recommended companion products please see the product web page at [www.cellsignal.com](http://www.cellsignal.com).

#### Background References:

- (1) Esmon, N.L. et al. (1982) *J Biol Chem* 257, 859-64.
- (2) Esmon, C.T. et al. (1982) *J Biol Chem* 257, 7944-7.
- (3) Dzionek, A. et al. (2000) *J Immunol* 165, 6037-46.
- (4) MacDonald, K.P. et al. (2002) *Blood* 100, 4512-20.
- (5) Bachem, A. et al. (2010) *J Exp Med* 207, 1273-81.

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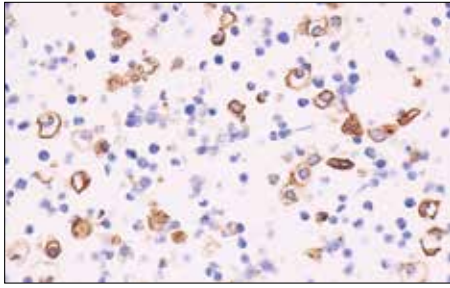
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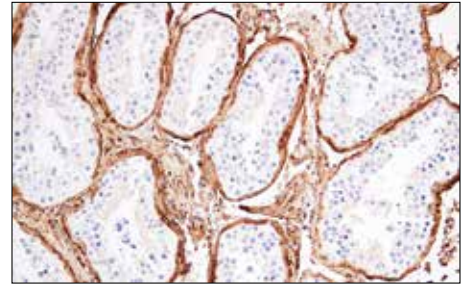
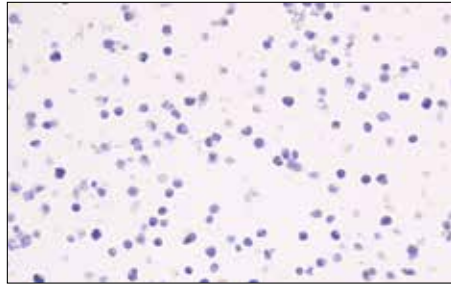
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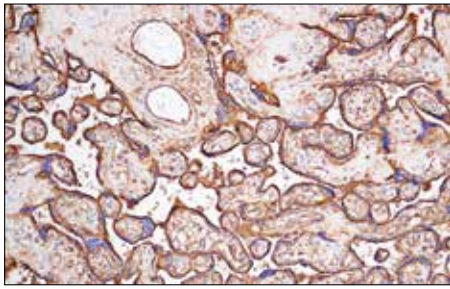
Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



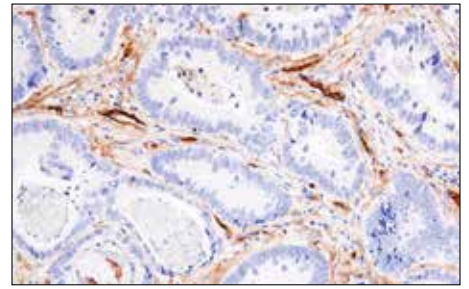
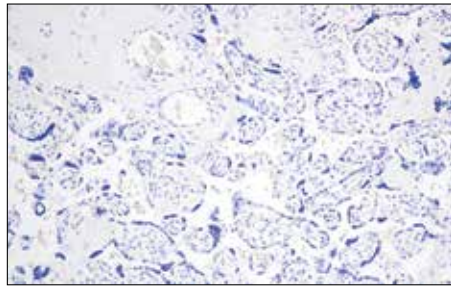
Immunohistochemical analysis of paraffin-embedded THP-1 cell pellet (left, positive) or Jurkat cell pellet (right, negative) using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb.



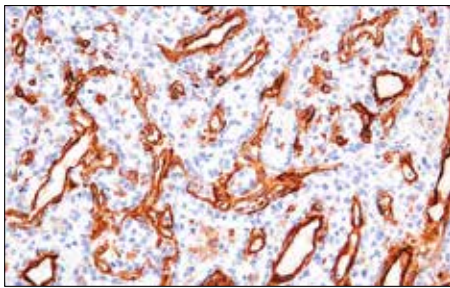
Immunohistochemical analysis of paraffin-embedded human testis using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb.



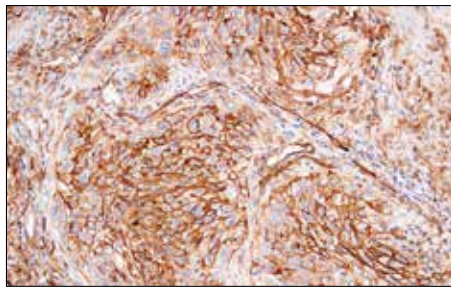
Immunohistochemical analysis of paraffin-embedded human placenta using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb (left) compared to concentration matched Rabbit (DA1E) mAb IgG XP<sup>®</sup> Isotype Control #3900 (right).



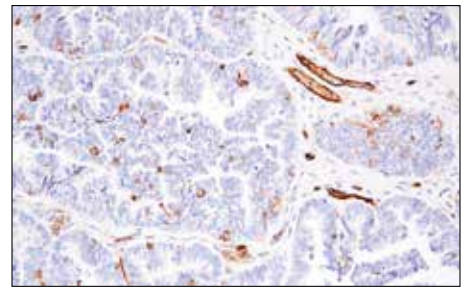
Immunohistochemical analysis of paraffin-embedded human colon carcinoma using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb.



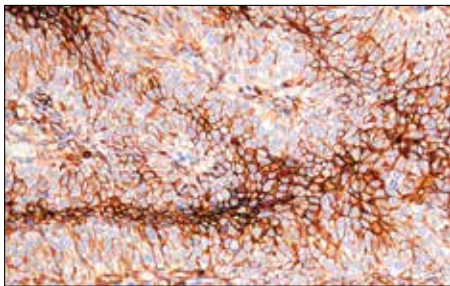
Immunohistochemical analysis of paraffin-embedded human gastric adenocarcinoma using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb performed on the Leica<sup>®</sup> BOND<sup>™</sup> Rx.



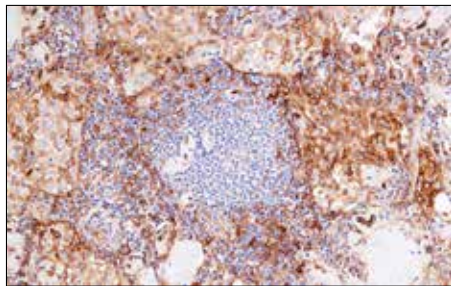
Immunohistochemical analysis of paraffin-embedded human squamous cell lung carcinoma using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human serous papillary carcinoma of the ovary using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb performed on the Leica<sup>®</sup> BOND<sup>™</sup> Rx.



Immunohistochemical analysis of paraffin-embedded human lymph node using CD141/Thrombomodulin (E7Y9P) XP<sup>®</sup> Rabbit mAb.

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