

### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# Mouse Anti Human Podoplanin With HRP-conjugated Secondary Antibody

Catalog No.Target SpeciesIsotypeDS-MB-02139HumanIgG2a

# **Synonyms**

Aggrus

# Specificity

DS-MB-02139 recognizes Human Podoplanin (gp36), a 36kDa type I cell membrane-associated glycoprotein, with a broad spectrum of distribution, being strongly expressed on the lymphatic endothelium found in lung, placenta and skeletal muscle and to a lesser extent in brain, kidney and liver.

Podoplanin is absent on blood endothelium and therefore DS-MB-02139 is readily able to distinguish between lymphatic vessels and blood vasculature. Although the specific function of this protein is undetermined, Podoplanin is reported to be a reliable indicator of tumour lymphangiogenesis.

**Immunogen:** ORF Human podoplanin ectodomain expressed in *E.coli* 

**Immunohistology:** 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.

**Histology Positive Control Tissue:** Normal lung

#### **Formulation**

Product Type: Monoclonal Antibody
Product Form: Purified IgG - liquid
Concentration: IgG concentration 1mg/ml
Preservative Stabliziers: 0.09% Sodium Azide
Buffer: Phosphate Buffered Saline



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# Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

**Shelf Life:** 18 months from dispatch

# **Applications**

**Table Summary of antibody applications and working conditions** 

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			•	
Western Blotting			•	
Immunohistology - frozen	•			0.75ug/ml - 2ug/ml
Immunohistology — paraffin	•			
Immunohistology - resin				
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorence staining			•	
Neutralization				

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

# Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000



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#### References

- 1. Matsui, K. *et al.* (2003) Lymphatic microvessels in the rat remnant kidney model of renal fibrosis: Aminopeptidase P and Podoplanin are discriminatory markers for endothelial cells of blood and lymphatic vessels. J. Am. Soc. Nephrol. 14: 1981-1989.
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- 4. Schacht, V. *et al.* (2003) T1a/podoplanin deficiency disrupts normal lymphatic vasculature formation and causes lymphedema. EMBO J. 22(14): 3546-3556.
- 5. Kato, Y. *et al.* (2003) Molecular Identification of Aggrus/T1alpha as a Platelet Aggregation-inducing Factor Expressed in Colorectal Tumors. J. Biol Chem 278(51): 51599-51605.