



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Mouse Anti-Human Podoplanin

### With HRP-conjugated Secondary Antibody

**Catalog No.**  
DS-MB-01143

**Target Species**  
Human

**Isotype**  
IgG1

#### **Preparation**

**Synonyms:** GP36

**Immunogen:** Resected tissue from dysgerminoma of the ovary

#### **Formulation**

**Product Type:** Monoclonal Antibody

**Product Form:** Purified IgG - liquid

**Buffer Solution:** Phosphate buffered saline

**Preservative Stabilizers:** 0.09% Sodium Azide, 1% Bovine Serum Albumin

#### **Specificity**

DS-MB-01143 detects podoplanin, a type-I transmembrane mucoprotein, which is highly expressed in the placenta, lung and skeletal muscle. The function of podoplanin is yet to be elucidated; however, it may be involved in cell migration and/or actin cytoskeleton organization. It is required for normal lung cell proliferation and alveolus formation at birth, and can induce platelet aggregation.

The homologous protein in other species has been described as a differentiation antigen and influenza-virus receptor.

Podoplanin is selectively expressed in lymphangiomas, Kaposi sarcomas, and a subset of angiosarcomas with probable lymphatic differentiation

#### **Reference**

1. Marks, A. *et al.* (1999) Characterization and distribution of an oncofetal antigen (M2A antigen) expressed on testicular germ cell tumours. *Br. J. Cancer* 80: 569-78
2. Stacker, SA. *et al.* (2002) The role of tumor lymphangiogenesis in metastatic spread. *FASEB J.* 16: 922-34.
3. Chu, A. Y. *et al.* (2005) Utility of D2-40, a novel mesothelial marker, in the diagnosis of malignant mesothelioma. *Mod. Pathol.* 18: 105-10
4. Sonne, S. B. *et al.* (2006) Identity of M2A (D2-40) antigen and gp36 (Aggrus, T1A-2, podoplanin) in human developing testis, testicular carcinoma in situ and germ-cell tumours. *Virchows Arch.* 449: 200-206
5. Heindl, L.M. *et al.* (2010) Intraocular tumor-associated lymphangiogenesis a novel prognostic factor for ciliary body melanomas with extraocular extension. *Ophthalmology* 117(2):334-42.

**The products are furnished for LABORATORY RESEARCH USE ONLY.**  
**Not for diagnostic or therapeutic use.**



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### Applications

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

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Flow Cytometry			•	
Immunohistology - Frozen(1)	•			1/10 - 1/40
Immunohistology – Paraffin (2)	•			1/10 - 1/40
Immunohistology - Resin			•	
ELISA			•	
Western Blotting			•	

**Note:** Other applications are not tested yet. Optimal dilutions should be determined.

(1) Histology Positive Control Tissue: Human lymph node

(2) This product does not require protein digestion pre-treatment of paraffin sections. This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections.

### Secondary Antibody Applications

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

### 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 date of dispatch.

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