

## **PODOPLANIN (D2-40)**

Format	Catalog No.	Pack size	Dilution
Concentrated	G2097 A, B, C	0.1, 0.5, 1.0 mL	1:100 - 200
Prediluted	G2097 AA, BB	6.0, 3.0 mL	Ready to use

### **ANTIBODY SPECIFICATIONS**

- **HOST SPECIES:** Mouse
- **CLONE:** D2-40
- **ISOTYPE:** IgG
- **CELLULAR LOCALIZATION:** Cytoplasmic
- **IMMUNOGEN:** Resected tissue from dysgerminoma of the ovary
- **MOLECULAR WEIGHT:** ~38 kDa.
- **SPECIES REACTIVITY:** Human; others not tested
- **POSITIVE CONTROL:** Tonsil, Lymph Node, Lymphangioma

### **INTENDED USE**

This antibody is intended **for research use only (RUO)** and is not approved for diagnostic or therapeutic applications. It is optimized for the detection of Podoplanin protein in formalin-fixed, paraffin-embedded (FFPE) human tissues by immunohistochemistry (IHC).

### **SUMMARY AND APPLICATION**

Podoplanin is a 38 kDa transmembrane mucoprotein that the D2-40 monoclonal antibody recognises. Only the endothelium of lymphatic capillaries expresses podoplanin; the blood vasculature does not. Podoplanin co-localizes with VEGFR3/FLT4, another indicator of lymphatic endothelial cells, in healthy skin and kidney.

### **SCIENTIFIC BACKGROUND:**

The lymphatic endothelium, lymphphangiomas, Kaposi's Sarcomas, and a subset of angiosarcomas with likely lymphatic differentiation all express podoplanin antibodies. Additionally, it has been demonstrated that podoplanin is expressed in seminomas, hemangioblastomas, and epithelioid mesotheliomas.

### **RECOMMENDED USAGE**

- **IHC Protocol Highlights:**
  - Dilution: 1–2 µg/mL
  - Incubation: 30 minutes at room temperature
  - Antigen Retrieval: Heat in 10 mM Tris with 1 mM EDTA (pH 9.0) at 95°C for 45 minutes, followed by cooling
- **Specimen Type:** FFPE sections, preferably ~4 µm

### **FORMULATION & STORAGE:**

- Buffer: 10 mM PBS, 0.05% BSA, 0.05% sodium azide

- Storage:
  - o Dilution: 1–2 µg/MI
  - o Without azide: –20 to –80°C
- Shelf Life: 24 months under proper conditions
- Hazard Classification: Non-hazardous; no MSDS required

**LIMITATIONS**

- Interpretation must be made by a qualified pathologist
- Tissue fixation and handling may affect staining quality
- Negative results do not always indicate absence of antigen—consider panel testing

**PRECAUTIONS**

- Contains 0.05% sodium azide – avoid ingestion and contact with skin or mucosa
- Wear gloves and avoid contact with eyes or mucosa
- Do not use reagents past expiration or if packaging appears compromised
- Do not pipette by mouth or reuse slides/containers without proper sterilization

**TECHNICAL SUPPORT**

For technical assistance, please contact Genebio Solution's Technical Support at [www.genebiosolution.com](http://www.genebiosolution.com)