Datasheet: MCA2543

Description: MOUSE ANTI HUMAN PODOPLANIN

Specificity: PODOPLANIN

Other names: AGGRUS

Format: Concentrate

Product Type: Monoclonal Antibody

Clone: D2-40

Isotype: IgG1

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 www.bio-rad-antibodies.com/protocols.

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<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Immunohistology - Frozen</td>
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<td>1/10 - 1/40</td>
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<td>Immunohistology - Paraffin</td>
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<td>Western Blotting</td>
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<td>Immunofluorescence</td>
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Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species: Human

Product Form: Purified IgG - liquid

Buffer Solution: Phosphate buffered saline

Preservative Stabilisers:
- 0.1% Sodium Azide (NaN₃)
- 1% Bovine Serum Albumin

Immunogen: Resected tissue from dysgeminoma of the ovary

External Database Links

UniProt: Q86YL7

Entrez Gene: 10630 PDPN

Synonyms: GP36
Specificity

Mouse anti human podoplanin antibody, clone D2-40 was raised against M2A antigen (Marks et al, 1999) and detects podoplanin (Sonne et al, 2006). Podoplanin (PDPN) is an O-glycosylated transmembrane glycoprotein that is selectively expressed by, and is a marker of, lymphatic endothelial cells. In normal tissue the ~38 kDa protein is also present in human lung, placenta, heart, skeletal muscle and kidney podocytes. It is not found in the blood vasculature (Breiteneder-Geleff et al, 1999, Wicki and Christofori, 2007).

The function of podoplanin is yet to be fully elucidated; however, it may be involved in cell migration and/or actin cytoskeleton organization. It is required for normal lung cell proliferation and alveolarus formation at birth, and can induce platelet aggregation (Ramirez et al, 2003, Wicki and Christofori, 2007).

Mouse anti human podoplanin antibody, clone D2-40 has been shown to be a sensitive and specific antibody for the detection of lymphatic endothelium in different malignancies, and is of value in the routine evaluation of lymphatic invasion in esophageal cancer (Kozlowski et al, 2011). Clone D2-40 was reported to be an excellent immunohistochemical marker of cutaneous Kaposi’s sarcomas, (Kahn et al, 2002), and may be useful in the differential diagnosis of epithelioid malignant mesothelioma versus adenocarcinoma (Chu et al, 2005).

Immunohistology

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.

Histology Positive Control Tissue

Human lymph node

References


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
Please see label for expiry date.

Health And Safety
Material Safety Datasheet documentation #10304 available at:

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE
Rabbit Anti Mouse IgG (STAR8...) DyLight®800
Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (STAR76...) RPE
Goat Anti Mouse IgG (STAR70...) FITC
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Rabbit Anti Mouse IgG (STAR9...) FITC
Human Anti Mouse IgG1 (HCA036...) HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)