Podoplanin (D9D7) Rabbit mAb

Applications

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Species Cross-Reactivity

- **H**: human
- **M**: mouse
- **R**: rat
- **sH**: swine
- **sM**: sheep
- **sR**: rat
- **c**: chicken
- **D**: dog
- **P**: pig
- **Ch**: choi
- **X**: Xenopus
- **Z**: zebra fish
- **B**: bovine

Molecular Wt. 36 kDa

Isotype Rabbit IgG

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
- Flow Cytometry 1:400

For application specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.

Background:
Podoplanin (aggrus, glycoprotein 36) is a single-pass transmembrane protein belonging to the type-1 family of sialomucin-like glycoproteins. Podoplanin was first described in the rat as a surface glycoprotein that regulated podocyte morphology (1). It is now commonly used as a marker of lymphatic endothelial cells, where its expression is associated with the process of lymphangiogenesis (2). Its role in this regard is presumably due to its putative involvement in regulating actin cytoskeleton dynamics (3). Research studies have shown that podoplanin expression is upregulated in a number of tumor types including colorectal cancers (4), oral squamous cell carcinomas (5), and germ cell tumors (6), with higher expression levels often associated with more aggressive tumors (7). Research studies have suggested a functional role for podoplanin in the stromal microenvironment of tumors. For example, it has been reported that podoplanin expression in cancer-associated fibroblasts (CAFs) is positively associated with a stromal environment that promotes cancer progression (8,9).

Specificity/Sensitivity:
Podoplanin (D9D7) Rabbit mAb recognizes endogenous levels of total podoplanin protein.

Source/Purification:
Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp31 of human podoplanin protein.

Background References:

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.

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