

CD248 (E9Z7O) XP[®] Rabbit mAb

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IHC-Bond, IHC-P, IF-IC	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 190	Source/Isotype: Rabbit IgG	UniProt ID: #Q9HCU0	Entrez-Gene Id: 57124
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation
IHC Leica Bond
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:100 - 1:400
1:100 - 1:400
1:200 - 1:400

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.*

For a carrier free (BSA and azide free) version of this product see product #68864.

Specificity/Sensitivity

CD248 (E9Z7O) XP[®] Rabbit mAb recognizes endogenous levels of total CD248 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro403 of human CD248 protein.

Background

CD248, also known as Endosialin and TEM1, is a stromal cell marker expressed on activated mesenchymal cells including fibroblasts and pericytes. Not normally detectable in most adult tissues, it is highly expressed in lymphoid tissues during development, and in disease states where increased stromal cell proliferation and migration are evident (1-3). CD248 is known to be upregulated in breast cancer, brain tumors (4-6), and other malignancies including sarcoma (12), and it has been implicated in sprouting angiogenesis and vasculogenesis (7). It is thought that the CD248 gene is upregulated in response to hypoxic conditions in the tumor environment through HIF2 activation (8). Interestingly, CD248 is found to be highly expressed in activated fibroblasts. In liver fibrosis for example, CD248 marks the Hepatic Stellate Cells, the activated cells responsible for matrix production (9,10). In kidney fibrosis, CD248 marks the key effector cells within the fibrotic stroma including pericytes, myofibroblasts, and stromal fibroblasts (11), and in Idiopathic Pulmonary Fibrosis, CD248 may be a marker for severity of disease (12). CD248 has become a target of interest for pharmaceutical intervention in a wide scope of diseases (13).

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween[®] 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human

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