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Smad5 Rabbit mAb
Catalog # AP76096

Specification

Smad5 Rabbit mAb - Product Information

Application	**WB, IHC-P, IHC-F, ICC**
Primary Accession	Q99717
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**Monoclonal Antibody**
Calculated MW	**52258**

Smad5 Rabbit mAb - Additional Information

Gene ID 4090

Other Names
SMAD5

Dilution
WB~~1/500-1/1000
IHC-P~~N/A
IHC-F~~N/A
ICC~~N/A

Format
50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.

Storage
Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Smad5 Rabbit mAb - Protein Information

Name SMAD5 (HGNC:6771)

Synonyms MADH5

Function
Transcriptional regulator that plays a role in various cellular processes including embryonic development, cell differentiation, angiogenesis and tissue homeostasis (PubMed:12064918, PubMed:16516194). Upon BMP ligand binding to their receptors at the cell surface, is phosphorylated by activated type I BMP receptors (BMPRIs) and associates with SMAD4 to form a heteromeric complex which translocates into the nucleus acting as transcription factor (PubMed:9442019). In turn, the hetero-trimeric complex recognizes cis- regulatory elements containing Smad Binding Elements (SBEs) to modulate the outcome of the signaling network (PubMed:<a

href="http://www.uniprot.org/citations/33510867" target="_blank">33510867). Non-phosphorylated SMAD5 has a cytoplasmic role in energy metabolism regulation by promoting mitochondrial respiration and glycolysis in response to cytoplasmic pH changes (PubMed:28675158). Mechanistically, interacts with hexokinase 1/HK1 and thereby accelerates glycolysis (PubMed:28675158).

Cellular Location
Cytoplasm. Nucleus Mitochondrion. Note=Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4

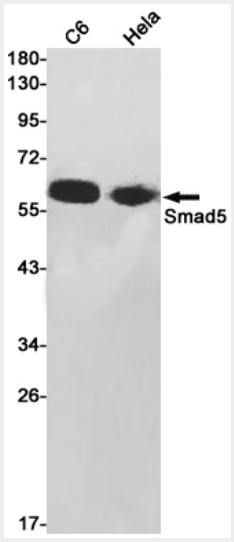
Tissue Location
Ubiquitous.

Smad5 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Smad5 Rabbit mAb - Images



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