

WNT5 Antibody

Catalog # ASC11881

Specification

WNT5 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

Application Notes

WB, IHC <u>O9H1J7</u> <u>NP_110402</u>, <u>17402919</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 39 kDa

Observed: 465 kDa KDa WNT5 antibody can be used for detection of WNT5 by Western blot at 1 - 2 μ g/ml. For immunofluorescence start at 20 μ g/mL.

WNT5 Antibody - Additional Information

Gene ID

Target/Specificity

81029

WNT5; WNT5 antibody is human, mouse and rat reactive. WNT5 antibody will detect both WNT5A and WNT5B. At least two isoforms of WNT5B are known to exist; this antibody will detect both isoforms.

Reconstitution & Storage WNT5 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

WNT5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

WNT5 Antibody - Protein Information

Name WNT5B

Function

Ligand for members of the frizzled family of seven transmembrane receptors. Probable developmental protein. May be a signaling molecule which affects the development of discrete regions of tissues. Is likely to signal over only few cell diameters (By similarity).

Cellular Location Secreted, extracellular space, extracellular matrix

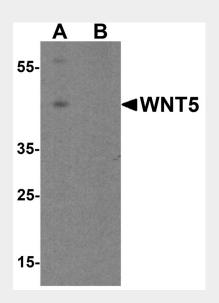
WNT5 Antibody - Protocols



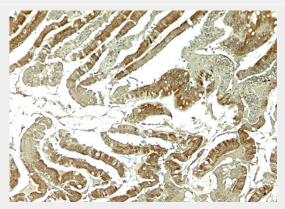
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WNT5 Antibody - Images



Western blot analysis of WNT5 in Jurkat cell lysate with WNT5 antibody at 1 μ g/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of WNT5 in rat colon tissue with WNT5 antibody at 5 µg/mL.

WNT5 Antibody - Background

WNT5A and WNT5B are near-identical members of the WNT gene family, which consists of structurally related genes which encode secreted signaling proteins that have been implicated in oncogenesis and in several developmental processes, including regulation of cell fate and patterning during embryogenesis (1,2). WNT5A and WNT5B coordinate chondrocyte proliferation and differentiation by differentially regulating cyclin D1 and p130 expression, as well as chondrocyte-specific Col2a1 expression (3). Up-regulation of WNT5A and WNT5B has been observed



in several types of human cancers, suggesting that they may be useful as diagnostic markers or potent therapeutic targets (4).

WNT5 Antibody - References

Saitoh T and Katoh M. Molecular cloning and characterization of human WNT5B on chromosome 12p13.3 region. Int. J. Oncol. 2001; 19:347-51.

Serio RN. Wnt of the two horizons: putting stem cell self-renewal and cell fate determination into context. Stem Cells Dev. 2014; epub Apr. 24.

Yang Y, Topol L, Lee H, et al. Wnt5a and Wnt5b exhibit distinct activities in coordinating chondrocyte proliferation and differentiation. Development 2003; 130:1003-15.

Saitoh T and Katoh M. Expression and regulation of WNT5A and WNT5B in human cancer:

up-regulation of WNT5A by TNFalpha in MKN45 cells and up-regulation of WNT5B by beta-estradiol in MCF-7 cells. Int. J. Mol. Med. 2002; 10:345-9.