

#### **WNT5 Antibody**

Catalog # ASC11881

## **Specification**

## **WNT5 Antibody - Product Information**

Application WB, IHC-P, E
Primary Accession O9H1I7

Other Accession
Reactivity
Host
Rebit

Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 39 kDa

Observed: 465 kDa KDa
Application Notes WNT5 antibody can be u

WNT5 antibody can be used for detection of WNT5 by Western blot at 1 - 2  $\mu$ g/ml. For immunofluorescence start at 20  $\mu$ g/mL.

#### **WNT5 Antibody - Additional Information**

Gene ID **81029** 

**Target/Specificity** 

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

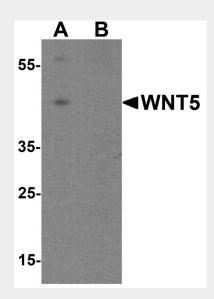
## WNT5 Antibody - Protocols



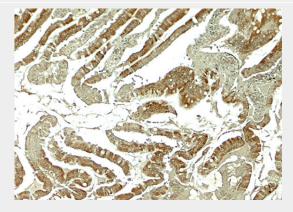
Provided below are standard protocols that you may find useful for product applications.

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

## WNT5 Antibody - Images



Western blot analysis of WNT5 in Jurkat cell lysate with WNT5 antibody at 1  $\mu$ 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





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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.