

Goat Anti-WNT4 Antibody

Peptide-affinity purified goat antibody Catalog # AF2162a

Specification

Goat Anti-WNT4 Antibody - Product Information

Application WB, E
Primary Accession P56705

Other Accession <u>NP_110388</u>, <u>54361</u>, <u>22417 (mouse)</u>

Reactivity
Predicted
Host
Clonality
Concentration
Human
Mouse, Rat
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 39052

Goat Anti-WNT4 Antibody - Additional Information

Gene ID 54361

Other Names

Protein Wnt-4, WNT4

Dilution

WB~~1:1000

 $E \sim N/A$

Format

0.5~mg~lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-WNT4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-WNT4 Antibody - Protein Information

Name WNT4

Function

Ligand for members of the frizzled family of seven transmembrane receptors (Probable). Plays an important role in the embryonic development of the urogenital tract and the lung (PubMed:<a



href="http://www.uniprot.org/citations/15317892" target="_blank">15317892, PubMed:16959810, PubMed:18179883, PubMed:18182450). Required for normal mesenchyme to epithelium transition during embryonic kidney development. Required for the formation of early epithelial renal vesicles during kidney development (By similarity). Required for normal formation of the Mullerian duct in females, and normal levels of oocytes in the ovaries (PubMed:15317892, PubMed:16959810, PubMed:18182450). Required for normal down-regulation of 3 beta-hydroxysteroid dehydrogenase in the ovary (PubMed:15317892, PubMed:16959810, PubMed:16959810, PubMed:18182450, PubMed:18182450). Required for normal lung development and for normal patterning of trachael cartilage rings (By similarity).

Cellular Location

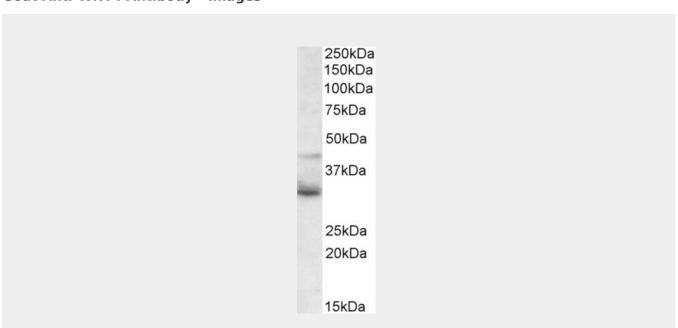
Secreted, extracellular space, extracellular matrix

Goat Anti-WNT4 Antibody - Protocols

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

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

Goat Anti-WNT4 Antibody - Images



AF2162a (1 μ g/ml) staining of JURKAT lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Goat Anti-WNT4 Antibody - Background

The WNT gene family consists of structurally related genes which encode secreted signaling proteins. These proteins have been implicated in oncogenesis and in several developmental processes, including regulation of cell fate and patterning during embryogenesis. This gene is a member of the WNT gene family, and is the first signaling molecule shown to influence the sex-determination cascade. It encodes a protein which shows 98% amino acid identity to the Wnt4 protein of mouse and rat. This gene and a nuclear receptor known to antagonize the testis-determining factor play a concerted role in both the control of female development and the prevention of testes formation. This gene and another two family members, WNT2 and WNT7B, may be associated with abnormal proliferation in breast tissue. Mutations in this gene can result in Rokitansky-Kuster-Hauser syndrome and in SERKAL syndrome.

Goat Anti-WNT4 Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.

A genome-wide association study identifies genetic variants in the CDKN2BAS locus associated with endometriosis in Japanese. Uno S, et al. Nat Genet, 2010 Aug. PMID 20601957.

Wnt4 and LAP2alpha as pacemakers of thymic epithelial senescence. Kvell K, et al. PLoS One, 2010 May 18. PMID 20502698.

The unappreciated Wnt-4 gene. Altchek A, et al. J Pediatr Adolesc Gynecol, 2010 Jun. PMID 20060343.

WNT4 is expressed in human fetal and adult ovaries and its signaling contributes to ovarian cell survival. J□□skel□inen M, et al. Mol Cell Endocrinol, 2010 Apr 12. PMID 19962424.