

WNT4 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6683C

Specification

WNT4 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region IHC-P, WB, FC,E <u>P56705</u> <u>O90X05</u>, <u>P22724</u> Human, Mouse, Rat Rat Rabbit Polyclonal Rabbit IgG 211-239

WNT4 Antibody (Center) - Additional Information

Gene ID 54361

Other Names Protein Wnt-4, WNT4

Target/Specificity

This WNT4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 211-239 amino acids from the Central region of human WNT4.

Dilution IHC-P~~1:10~50 WB~~1:2000 FC~~1:25 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

WNT4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

WNT4 Antibody (Center) - 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:<u>15317892</u>, PubMed:<u>16959810</u>, PubMed:<u>18179883</u>, PubMed:<u>18182450</u>). 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:<u>15317892</u>, PubMed:<u>16959810</u>, PubMed:<u>18182450</u>). Required for normal down-regulation of 3 beta-hydroxysteroid dehydrogenase in the ovary (PubMed:<u>15317892</u>, PubMed:<u>16959810</u>, PubMed:<u>18182450</u>). Required for normal patterning of trachael cartilage rings (By similarity).

Cellular Location

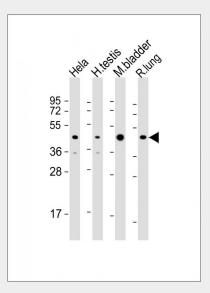
Secreted, extracellular space, extracellular matrix

WNT4 Antibody (Center) - Protocols

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

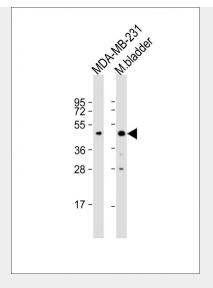
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

WNT4 Antibody (Center) - Images

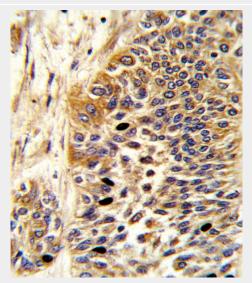


All lanes : Anti-WNT4 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: human testis lysate Lane 3: mouse bladder lysate Lane 4: rat lung lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



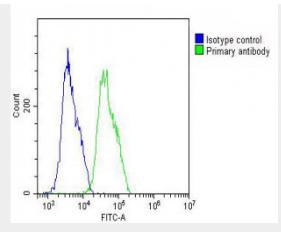


All lanes : Anti-WNT4 Antibody (Center) at 1:2000 dilution Lane 1: MDA-MB-231 whole cell lysate Lane 2: mouse bladder lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human bladder carcinoma reacted with WNT4 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Overlay histogram showing MCF-7 cells stained with AP6683c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP6683c, 1:25 dilution) for 60 min at 37°C. The secondary lgG, antibody used was Goat-Anti-Rabbit **DyLight**® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG $(1\mu g/1 \times 10^{6} \text{ cells})$ used under the same conditions. Acquisition of >10, 000 events was performed.

WNT4 Antibody (Center) - Background

The WNT family consists of secreted signaling proteins. These proteins have been implicated in oncogenesis and in several developmental processes, including regulation of cell fate and patterning during embryogenesis. WNT4 is a protein which shows 98% amino acid identity to the Wnt4 protein of mouse and rat. It play a concerted role in both the control of female development and the prevention of testes formation.

WNT4 Antibody (Center) - References

Kuulasmaa,T., Horm. Metab. Res. 40 (10), 668-673 (2008) Miyakoshi,T., Endocr. Pathol. 19 (4), 261-273 (2008) WNT4 Antibody (Center) - Citations

- Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and apoptosis of colorectal cancer cells.
- <u>Overexpression of miR-214 promotes the progression of human osteosarcoma by regulating</u> <u>the Wnt/β-catenin signaling pathway.</u>
- Estimated diversity of messenger RNAs in each murine spermatozoa and their potential function during early zygotic development.