Anti-Wnt3a Antibody

HA500193

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 39 kDa

Description: 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. It encodes a protein which shows 96% amino acid identity to mouse Wnt3A protein, and 84% to human WNT3 protein, another WNT gene product. This gene is clustered with WNT14 gene, another family member, in chromosome 1q42 region.

Immunogen: Synthetic peptide within human Wnt3a aa 241-290.

Positive control: Human placenta tissue.

Subcellular location: Secreted, extracellular space, extracellular matrix.

Database links: SwissProt: P56704 Human

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:500
IHC-P	1:200

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

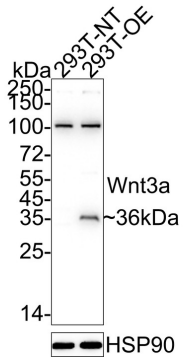

Fig1: Western blot analysis of Wnt3a on different lysates with Rabbit anti-Wnt3a antibody (HA500193) at 1/1,000 dilution.

Lane 1: 293T-NT cell lysate
Lane 2: 293T-OE-Wnt3a cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 39 kDa
Observed band size: 36 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA500193) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

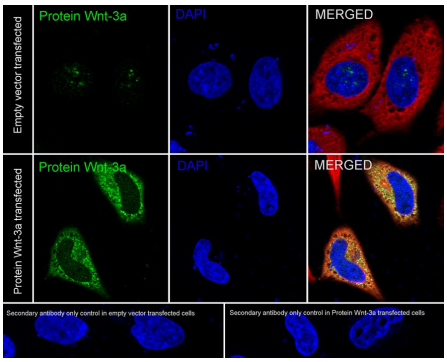

Fig2: Immunocytochemistry analysis of 293T cells transfected with or without Wnt3a labeling Wnt3a with Rabbit anti-Wnt3a antibody (HA500193) at 1/500 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Wnt3a antibody (HA500193) at 1/500 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

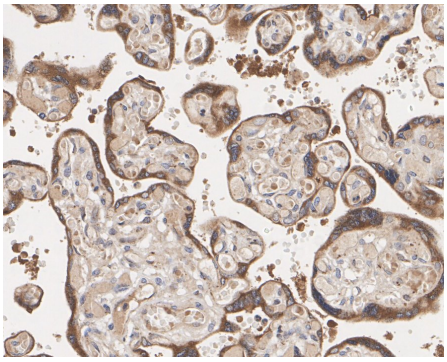

Fig3: Immunohistochemical analysis of paraffin-embedded human placenta tissue with Rabbit anti-Wnt3a antibody (HA500193) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500193) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Kyun ML. et. al. Wnt3a Stimulation Promotes Primary Ciliogenesis through beta-Catenin Phosphorylation-Induced Reorganization of Centriolar Satellites. Cell Rep. 2020 Feb
2. Lv X. et. al. Overexpression of miR-27b-3p Targeting Wnt3a Regulates the Signaling Pathway of Wnt/beta-Catenin and Attenuates Atrial Fibrosis in Rats with Atrial Fibrillation. Oxid Med Cell Longev. 2019 Apr