

Anti-Wnt1 (RABBIT) Antibody

Wnt1 Antibody Catalog # ASR5406

Specification

Anti-Wnt1 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugated Unconjugated

Target Species Human

Reactivity
Clonality
Application

Human, Mouse
Polyclonal
WB, E, I, LCI

Application Note This affinity purified antibody has been

tested for use in ELISA and western

blottina.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen This affinity purified antibody was

prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding to an internal region of human Wnt1 protein.

Preservative 0.01% (w/v) Sodium Azide

Anti-Wnt1 (RABBIT) Antibody - Additional Information

Gene ID 7471

Other Names 7471

Purity

This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human and mouse Wnt1 protein. A BLAST analysis was used to suggest cross-reactivity with Wnt1 from mouse, human, rat, bovine, dog, macaque, and opossum based on a 100% homology with the immunizing sequence. Partial cross-reactivity is expected against chicken Wnt1 based on a 91% sequence homology. Cross-reactivity with Wnt1 from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-Wnt1 (RABBIT) Antibody - Protein Information

Name WNT1

Synonyms INT1

Function

Ligand for members of the frizzled family of seven transmembrane receptors (Probable). Acts in the canonical Wnt signaling pathway by promoting beta-catenin-dependent transcriptional activation (PubMed:23499309, PubMed:23656646, PubMed:26902720, PubMed:28528193). In some developmental processes, is also a ligand for the coreceptor RYK, thus triggering Wnt signaling (By similarity). Plays an essential role in the development of the embryonic brain and central nervous system (CNS) (By similarity). Has a role in osteoblast function, bone development and bone homeostasis (PubMed:23499309, PubMed:23656646).

Cellular Location

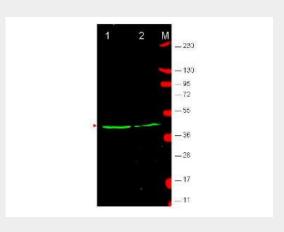
Secreted, extracellular space, extracellular matrix. Secreted

Anti-Wnt1 (RABBIT) Antibody - Protocols

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

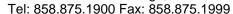
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Wnt1 (RABBIT) Antibody - Images



Western blot using Rockland's affinity purified anti-Wnt1 antibody shows detection of endogenous Wnt1. Lane 1: human-derived MCF7 cell lysate (p/n W09-000-360). Lane 2: mouse-derived 3T3 cell







lysate (p/n W10-000-358). The band at ~41kDa, indicated by the arrowhead, corresponds to Wnt1. After transfer, the membrane was blocked with 5% BLOTTO (p/n B501-0500). Primary antibody was used at a 1:1,400 dilution in PBS containing 1% BLOTTO. The specificity of the antibody was confirmed by peptide competition which completely blocked reaction of the antibody with Wnt1 (data not shown).

Anti-Wnt1 (RABBIT) 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. Wnt1 (Wingless-type MMTV integration site family member 1) is a member of the WNT gene family. It is highly conserved in evolution and the protein encoded by this gene is known to be 98% identical to mouse Wnt1 protein at the amino acid level. Studies in mouse indicate that the Wnt1 protein functions in the induction of the mesencephalon and cerebellum. This gene was originally considered as a candidate gene for Joubert syndrome, an autosomal recessive disorder with cerebellar hypoplasia as a leading feature. However, further studies suggested that the gene mutations might not have a significant role in Joubert syndrome. Wnt1 is secreted as an extracellular matrix protein.