10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Wnt1 (MOUSE) Monoclonal Antibody
Wnt1 Antibody
Catalog # ASR4174

Specification

Anti-Wnt1 (MOUSE) Monoclonal Antibody - Product Information

Host	**Mouse**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Mouse**
Clonality	**Monoclonal**
Application	**WB, E, I, LCI**
Application Note	**This protein-A purified antibody has been tested for use western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 41 kDa in size corresponding to Wnt1 by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Synthetic peptide corresponding to an internal region of human Wnt1 protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Wnt1 (MOUSE) Monoclonal Antibody - Additional Information

Gene ID 7471

Other Names
7471

Purity
Anti-Wnt1 antibody purified from tissue culture supernatant by Protein-A chromatography followed by extensive dialysis against the buffer stated above. 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, opossum and rat 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.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Wnt1 (MOUSE) Monoclonal 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).

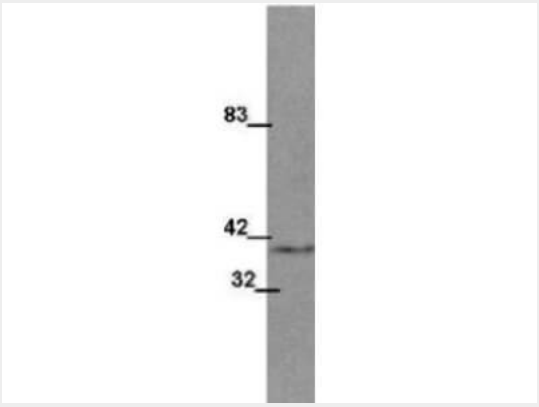
Cellular Location
Secreted, extracellular space, extracellular matrix. Secreted

Anti-Wnt1 (MOUSE) Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Wnt1 (MOUSE) Monoclonal Antibody - Images



Western blot using Rockland's Protein A purified anti-Wnt1 monoclonal antibody shows detection

of Wnt1 protein in mouse testis lysate. The results show specific binding corresponding to the ~41 kDa Wnt1 protein. Primary antibody was used at a 1:500 dilution. Personal communication, Stephen Brown, Brown University

Anti-Wnt1 (MOUSE) Monoclonal 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.