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WNT1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1313a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P04628
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	10C8
Isotype	IgG1
Calculated MW	40982
Description	WNT1: wingless-type MMTV integration site family, member 1. 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 is very conserved in evolution, and the protein encoded by this gene is known to be 98% identical to the mouse Wnt1 protein at the amino acid level. The 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 rolein Joubert syndrome. This gene is clustered with another family member, WNT10B, in the chromosome 12q13 region.
Immunogen	Purified recombinant fragment of WNT1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	7471
Other Names	Proto-oncogene Wnt-1, Proto-oncogene Int-1 homolog, WNT1, INT1
Dilution	WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~N/A
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	WNT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

References

1. Blood. 2008 Jan 1;111(1):122-31. 2. BMC Cancer. 2005 May 24;5:53.

Images

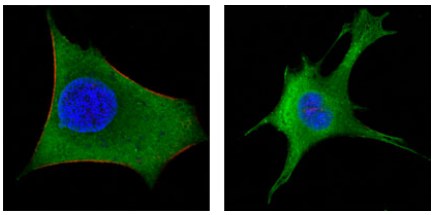

Figure3: Confocal immunofluorescence analysis of Hela (left) and 3T3-L1 (right) cells using WNT1 mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

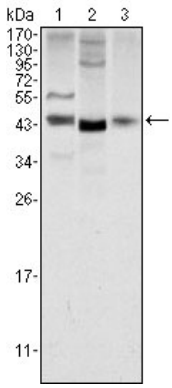

Figure 1: Western blot analysis using WNT1 mouse mAb against NIH/3T3 (1), 3T3L1 (2) and Hela (3) cell lysate.

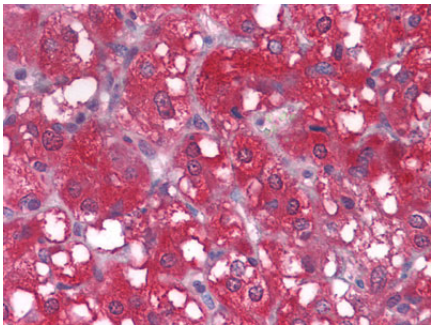

Figure 2: Immunohistochemical analysis of paraffin-embedded human LAdrenal tissues using WNT1 mouse mAb

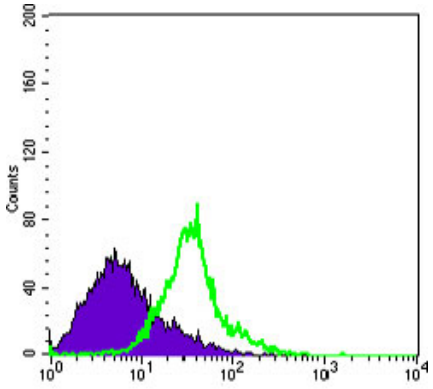

Figure 4: Flow cytometric analysis of Hela cells using WNT1 mouse mAb (green) and negative control (purple).