ARG55267
anti-Wnt3 / Wnt3a antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes Wnt3 / Wnt3a
Tested Reactivity	Hu
Tested Application	WB
Specificity	This antibody detects endogenous levels of Wnt3a and Wnt3.
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	Wnt3 / Wnt3a
Species	Human
Immunogen	Purified recombinant fragment of Human Wnt3a (NP_149122.1).
Conjugation	Un-conjugated
Alternate Names	Protein Wnt-3a

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

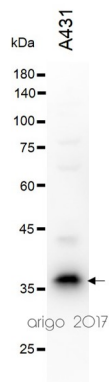
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.03% Proclin 300 and 50% Glycerol
Preservative	0.03% Proclin 300
Stabilizer	50% Glycerol
Concentration	2.36 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 89780 Human Swiss-port # P56704 Human
Gene Symbol	WNT3A
Gene Full Name	wingless-type MMTV integration site family, member 3A
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. 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. [provided by RefSeq, Jul 2008]
Function	Ligand for members of the frizzled family of seven transmembrane receptors. Wnt-3 and Wnt-3a play distinct roles in cell-cell signaling during morphogenesis of the developing neural tube. [UniProt]
Research Area	Developmental Biology antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	39 kDa
PTM	Palmitoleylation by PORCN is required for efficient binding to frizzled receptors. Palmitoleylation is required for proper trafficking to cell surface, vacuolar acidification is critical to release palmitoleylated WNT3A from WLS in secretory vesicles (PubMed:20826466, PubMed:21244856, PubMed:24292069). Depalmitoleylated by NOTUM, leading to inhibit Wnt signaling pathway, possibly by promoting disulfide bond formation and oligomerization (PubMed:25731175). Proteolytic processing by TIKI1 and TIKI2 promotes oxidation and formation of large disulfide-bond oligomers, leading to inactivation of WNT3A. Disulfide bonds have critical and distinct roles in secretion and activity. Loss of each conserved cysteine in WNT3A results in high molecular weight oxidized Wnt oligomers, which are formed through inter-Wnt disulfide bonding.
Cellular Localization	Secreted > extracellular space > extracellular matrix. [UniProt]

Images



ARG55267 anti-Wnt3 / Wnt3a antibody WB image

Western blot: 30 µg of A431 cell lysate stained with ARG55267 anti-Wnt3 / Wnt3a antibody at 1:1000 dilution.