

ARG56971 anti-Wnt3a antibody [3A6]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [3A6] recognizes Wnt3a
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	3A6
Isotype	IgG2a, kappa
Target Name	Wnt3a
Species	Human
Immunogen	Recombinant fragment around aa. 19-352 of Human Wnt3a.
Conjugation	Un-conjugated
Alternate Names	Protein Wnt-3a

Application Instructions

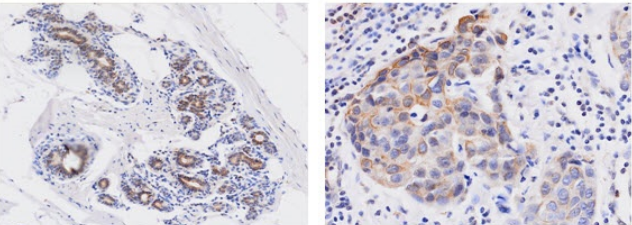
Application table	Application	Dilution
	IHC-P	1:50
	WB	1:1000 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 0.1M Sodium citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 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.

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]
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.

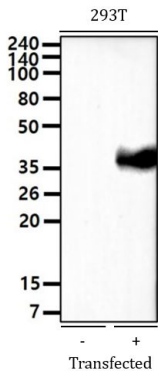
Images



Human breast cancer tissue

ARG56971 anti-Wnt3a antibody [3A6] IHC-P image

Immunohistochemistry: Paraffin embedded sections of Human breast cancer tissue stained with ARG56971 anti-Wnt3a antibody [3A6] at 1:50 for 2 hours at RT. Antigen Retrieval: Boil tissue section in 0.1M Sodium citrate buffer (pH 6.0) for 20 min.



ARG56971 anti-Wnt3a antibody [3A6] WB image

Western blot: 293T cells untransfected (left) or transfected by Wnt3a (right). 40 µg of cell lysates stained with ARG56971 anti-Wnt3a antibody [3A6] at 1:1000 dilution.