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RYK Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8543b

Product Information

Application	WB, FC, E
Primary Accession	P34925
Reactivity	Human, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1671CT575.42.61
Calculated MW	67815

Additional Information

Gene ID	6259
Other Names	Tyrosine-protein kinase RYK, 2.7.10.1, RYK, JTK5A
Target/Specificity	This RYK antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 260-565 amino acids from human RYK.
Dilution	WB~~1:1000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RYK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RYK (HGNC:10481)
Synonyms	JTK5A
Function	May be a coreceptor along with FZD8 of Wnt proteins, such as WNT1, WNT3, WNT3A and WNT5A. Involved in neuron differentiation, axon guidance, corpus callosum establishment and neurite outgrowth. In response to WNT3 stimulation, receptor C-terminal cleavage occurs in its transmembrane region and allows the C-terminal intracellular product to translocate from the

	cytoplasm to the nucleus where it plays a crucial role in neuronal development.
Cellular Location	Membrane; Single-pass type I membrane protein. Nucleus. Cytoplasm. Note=In cells that have undergone neuronal differentiation, the C-terminal cleaved part is translocated from the cytoplasm to the nucleus.
Tissue Location	Observed in all the tissues examined.

Background

May be a coreceptor along with FZD8 of Wnt proteins, such as WNT1, WNT3, WNT3A and WNT5A. Involved in neuron differentiation, axon guidance, corpus callosum establishment and neurite outgrowth. In response to WNT3 stimulation, receptor C- terminal cleavage occurs in its transmembrane region and allows the C-terminal intracellular product to translocate from the cytoplasm to the nucleus where it plays a crucial role in neuronal development.

References

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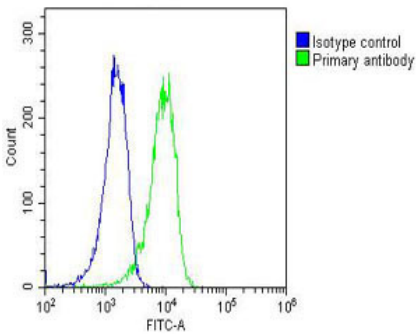
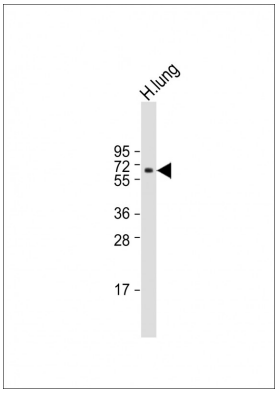
Tamagnone L.,et al.Oncogene 8:2009-2014(1993).
Wang X.C.,et al.Mol. Med. 2:189-203(1996).
Katso R.M.,et al.Mol. Cell. Biol. 19:6427-6440(1999).
Lu W.,et al.Cell 119:97-108(2004).

Images



Overlay histogram showing A431 cells stained with AM8543b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8543b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OJ192088) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was mouse IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Anti-RYK Antibody at 1:1000 dilution + human lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.