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RYK Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM1912b

Product Information

Application	WB, E
Primary Accession	P34925
Other Accession	NP_001005861.1, NP_002949.2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b,k
Clone Names	240CT2.2.4
Calculated MW	67815

Additional Information

Gene ID	6259
Other Names	Tyrosine-protein kinase RYK, RYK, JTK5A
Target/Specificity	This RYK monoclonal antibody is generated from mouse immunized with RYK recombinant protein.
Dilution	WB~~1:500~1000 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

The protein encoded by this gene is an atypical member of the family of growth factor receptor protein tyrosine kinases, differing from other members at a number of conserved residues in the activation and nucleotide binding domains. This gene product belongs to a subfamily whose members do not appear to be regulated by phosphorylation in the activation segment. It has been suggested that mediation of biological activity by recruitment of a signaling-competent auxiliary protein may occur through an as yet uncharacterized mechanism. Two alternative splice variants have been identified, encoding distinct isoforms.

References

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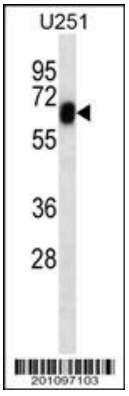
Couch, F.J., et al. Cancer Epidemiol. Biomarkers Prev. 19(1):251-257(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :
Szafranski, K., et al. Genome Biol. 8 (8), R154 (2007) :
Watanabe, A., et al. Cleft Palate Craniofac. J. 43(3):310-316(2006)

Images



RYK (Cat. #AM1912b) western blot analysis in U251 cell line lysates (35µg/lane).This demonstrates the RYK antibody detected the RYK protein (arrow).