

### RYK Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM1912b

### Specification

# **RYK Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>P34925</u> <u>NP\_001005861.1</u>, <u>NP\_002949.2</u> Human Mouse Monoclonal IgG2b,k 67815

# **RYK Antibody - 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

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.

# **RYK Antibody - Protein Information**

Name RYK (<u>HGNC:10481</u>)

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.

### **RYK Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **RYK Antibody Images**



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

### **RYK Antibody - 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.

# **RYK Antibody - References**

Carter, T.C., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(2):84-93(2010) 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)