

PTK7 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1431a

Specification

PTK7 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, IHC, E <u>013308</u> Human Mouse Monoclonal IgG1 118kDa KDa

Receptor protein tyrosine kinases transduce extracellular signals across the cell membrane. A subgroup of these kinases lack detectable catalytic tyrosine kinase activity but retain roles in signal transduction. The protein encoded by this gene is a member of this subgroup of tyrosine kinases and may function as a cell adhesion molecule. This gene is thought to be expressed in colon carcinomas but not in normal colon, and therefore may be a marker for or may be involved in tumor progression. Four transcript variants encoding four different isoforms have been found for this gene.Tissue specificity: Highly expressed in lung, liver, pancreas, kidney, placenta and melanocytes. Weakly expressed in thyroid gland, ovary, brain, heart and skeletal muscle. Also expressed in erythroleukemia cells. But not expressed in colon.

Immunogen Purified recombinant fragment of human PTK7 expressed in E. Coli.

Formulation Ascitic fluid containing 0.03% sodium azide.

PTK7 Antibody - Additional Information

Gene ID 5754

Other Names Inactive tyrosine-protein kinase 7, Colon carcinoma kinase 4, CCK-4, Protein-tyrosine kinase 7, Pseudo tyrosine kinase receptor 7, Tyrosine-protein kinase-like 7, PTK7, CCK4

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PTK7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



PTK7 Antibody - Protein Information

Name PTK7

Synonyms CCK4

Function

Inactive tyrosine kinase involved in Wnt signaling pathway. Component of both the non-canonical (also known as the Wnt/planar cell polarity signaling) and the canonical Wnt signaling pathway. Functions in cell adhesion, cell migration, cell polarity, proliferation, actin cytoskeleton reorganization and apoptosis. Has a role in embryogenesis, epithelial tissue organization and angiogenesis.

Cellular Location

Membrane; Single- pass type I membrane protein. Cell junction. Note=Colocalizes with MMP14 at cell junctions. Also localizes at the leading edge of migrating cells

Tissue Location

Highly expressed in lung, liver, pancreas, kidney, placenta and melanocytes. Weakly expressed in thyroid gland, ovary, brain, heart and skeletal muscle. Also expressed in erythroleukemia cells. But not expressed in colon

PTK7 Antibody - Protocols

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

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

PTK7 Antibody - Images





Figure 1: Western blot analysis using PTK7 mouse mAb against Hela (1), A431 (2), HCT116 (3), Caco2 (4), HepG2 (5) and MCF-7 (6) cell lysate.



Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using PTK7 mouse mAb with DAB staining.

PTK7 Antibody - References

1. Oncogene. 1995 Nov 16;11(10):2179-84. 2. Cytogenet Cell Genet. 1997;76(1-2):43-4. 3. Biochem Biophys Res Commun. 2008 Jul 11;371(4):793-8.