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PTK7 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1431a

Product Information

Application	WB, IHC, E
Primary Accession	Q13308
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4F9
Isotype	IgG1
Calculated MW	118392
Description	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.

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.

Protein Information

Name	PTK7
Synonyms	CCK4
Function	Inactive tyrosine kinase involved in the Wnt signaling pathway. Component of both the non-canonical (also known as the Wnt/planar cell polarity signaling) and the canonical Wnt signaling pathways. Functions in cell adhesion, cell migration, cell polarity, proliferation, actin cytoskeleton reorganization and apoptosis. Has a role in embryogenesis, epithelial tissue organization and angiogenesis. Does not bind ATP (PubMed:24107129, PubMed:32619402).
Cellular Location	Cell 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

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.

Images

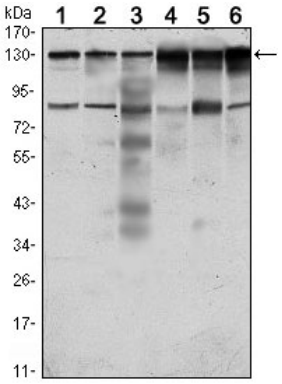


Figure 1: Western blot analysis using PTK7 mouse mAb against Hela (1), A431 (2), HCT116 (3), Caco2 (4), HepG2 (5) and MCF-7 (6) cell lysate.

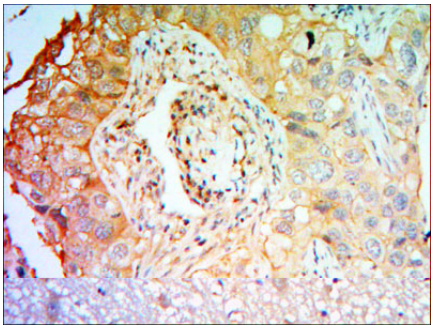


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using PTK7 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.