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PTK7 Antibody
Catalog # ASC10569

Specification

PTK7 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q13308
Other Accession	AAH71557, 47938093
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**PTK7 antibody can be used for detection of PTK7 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

PTK7 Antibody - Additional Information

Gene ID	**5754**

Target/Specificity
PTK7;

Reconstitution & Storage
PTK7 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

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

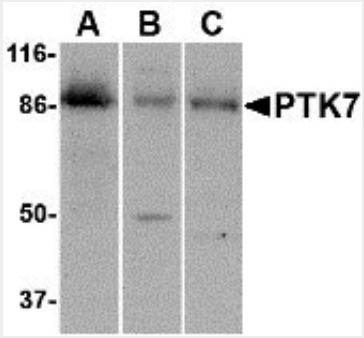
Tissue Location
Highly expressed in lung, liver, pancreas, kidney, placenta and melanocytes. Weakly expressed in thyroid gland, ovary, brain, heart and skeletal muscle. Also expressed in erythroleukemia cells. But not expressed in colon

PTK7 Antibody - Protocols

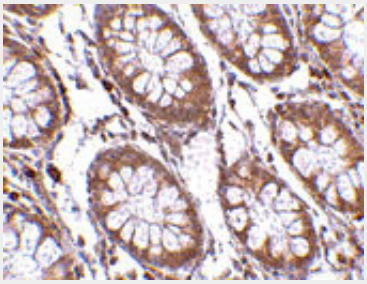
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PTK7 Antibody - Images



Western blot analysis of PTK7 in (A) human colon, (B) mouse kidney and (C) rat liver tissue lysate with PTK7 antibody at 1 µg/mL.



Immunohistochemistry of PTK7 in human colon tissue with PTK7 antibody at 2.5 µg/mL.

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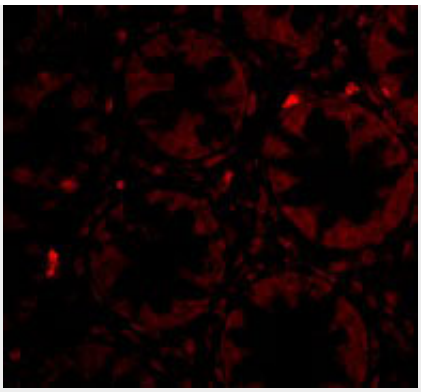

Immunofluorescence of PTK7 in Human Colon cells with PTK7 antibody at 20 µg/mL.

PTK7 Antibody - Background

PTK7 Antibody: Protein-tyrosine kinases (PTKs) play important roles in regulating cell proliferation and differentiation during development. One member of the PTK family, PTK7, has been suggested to regulate the planar cell polarity (PCP) pathway in vertebrates and may play a role in neural convergent extension and neural tube closure. PTK7 has also been implicated in the development of cancer. Loss of PTK7 expression was seen in several melanoma cell lines and biopsies. Conversely, high-throughput analysis of acute myeloid leukemia samples showed an increased level of PTK7 expression compared to normal bone marrow and purified CD34+ cells. Multiple isoforms of PTK7 are known to exist.

PTK7 Antibody - References

Park SK, Lee HS and Lee ST. Characterization of the human full-length PTK7 cDNA encoding a receptor protein kinase-like molecule closely related to chick KLG. J. Biochem.1996; 119:235-9.
Lu X, Borchers AG, Jolicoeur C, et al. PTK7/CCK-4 is a novel regulator of planar cell polarity in vertebrates. Nature2004; 430:93-8.
Easty DJ, Mitchell PJ, Patel K, et al. Loss of expression of receptor tyrosine kinase family genes PTK7 and SEK in metastatic melanoma. Int. J. Cancer1997; 1061-5.
Muller-Tidow C, Schwable J, Steffen B, et al. High-throughput analysis of genome-wide receptor tyrosine kinase expression in human cancers identifies potential novel drug targets. Clin. Cancer Res.2004; 10:1241-9.