

**PTK7 Antibody**  
**Catalog # ASC10569****Specification**

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**PTK7 Antibody - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">Q13308</a>
Other Accession	<a href="#">AAH71557</a> , <a href="#">47938093</a>
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**

Antibody can be stored at 4°C up to one year. 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

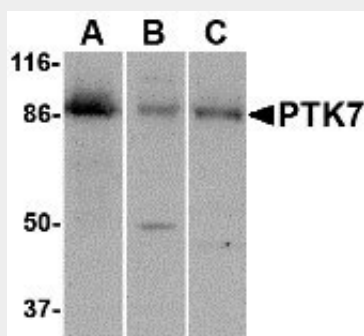
**Tissue Location**

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

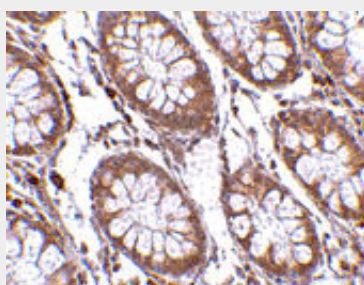
**PTK7 Antibody - Protocols**

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

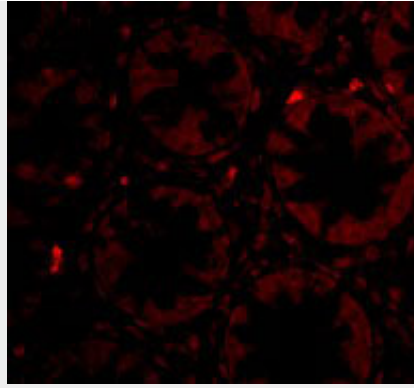
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**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.



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. *Nature*2004; 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. Cancer*1997; 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.