

CCK4 (PTK7) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7800a

Specification

CCK4 (PTK7) Antibody (N-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region IHC-P, FC, WB,E <u>013308</u> Human Rabbit Polyclonal Rabbit IgG 21-52

CCK4 (PTK7) Antibody (N-term) - 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

Target/Specificity

This CCK4 (PTK7) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 21-52 amino acids from the N-terminal region of human CCK4 (PTK7).

Dilution IHC-P~~1:50~100 FC~~1:10~50 WB~~1:1000-1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

CCK4 (PTK7) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CCK4 (PTK7) Antibody (N-term) - 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

CCK4 (PTK7) Antibody (N-term) - 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>

CCK4 (PTK7) Antibody (N-term) - Images



All lanes : Anti-CCK4 (PTK7) Antibody (N-term) at 1:1000-1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: Caco2 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 118 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Flow cytometric analysis of NCI-H460 cells using CCK4 (PTK7) Antibody (N-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CCK4 (PTK7) Antibody (N-term) - Background

CCK4 may function as a cell adhesion molecule. Although it belongs to the insuline receptor subfamily of the Tyr protein kinases, it likely lacks the catalytic activity of a tyrosine kinase. It may be connected to the pathophysiology of colon carcinomas and/or may represent a tumor progression marker. This Type I membrane protein is highly expressed in lung, liver, pancreas, kidney, placenta and melanocytes, but weakly expressed in thyroid gland, ovary, brain, heart and skeletal muscle, and not in colon. It is also expressed in erythroleukemia cells.

CCK4 (PTK7) Antibody (N-term) - References

```
Zhang, H., et al., Nat. Biotechnol. 21(6):660-666 (2003).
Park, S.K., et al., J. Biochem. 119(2):235-239 (1996).
Mossie, K., et al., Oncogene 11(10):2179-2184 (1995).
CCK4 (PTK7) Antibody (N-term) - Citations
```



• PTK7 protein is decreased in epithelial ovarian carcinomas with poor prognosis.