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CCK4 (PTK7) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7800a

Product Information

Application	FC, IHC-P, WB, E
Primary Accession	Q13308
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB01501
Calculated MW	118392
Antigen Region	21-52

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	FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000 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.

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

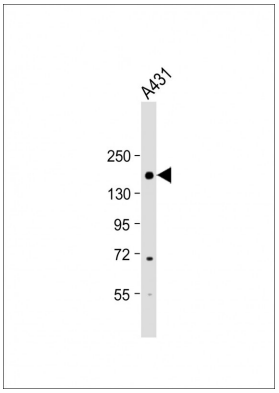
Background

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.

References

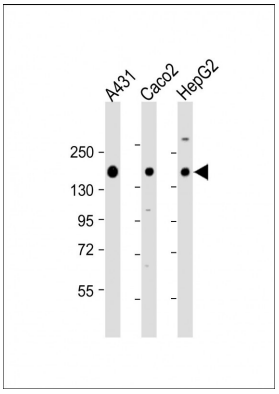
Zhang, H., et al., Nat. Biotechnol. 21(6):660-666 (2003).
Park, S.K., et al., J. Biochem. 119(2):235-239 (1996).
Mossie, K., et al., Oncogene 11(10):2179-2184 (1995).

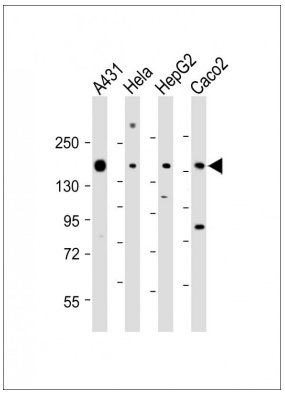
Images



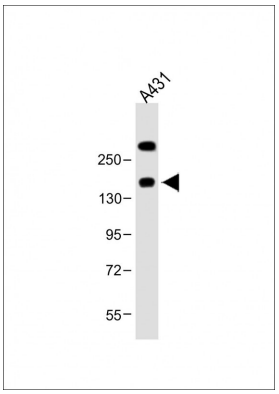
Anti-CCK4 (PTK7) Antibody (N-term) at 1:2000 dilution + A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 118 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-CCK4 (PTK7) Antibody (N-term) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: Caco2 whole cell lysate Lane 3: HepG2 whole cell lysate Lysates/proteins at 20 µg 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.

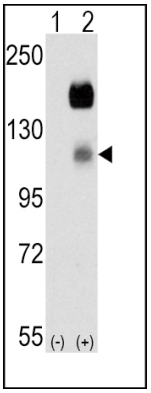




All lanes : Anti-CCK4 (PTK7) Antibody (N-term) at 1:1000-1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: Caco2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000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

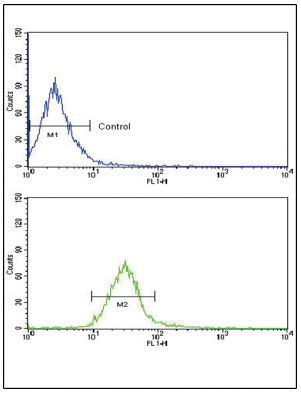


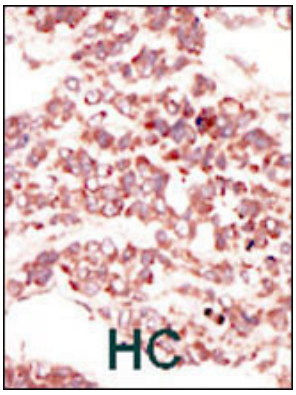
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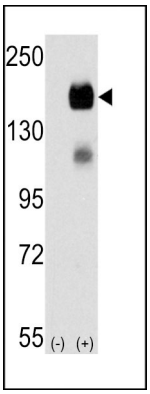
Western blot analysis of CCK4 (arrow) using rabbit polyclonal CCK4 Antibody (N-term) (Cat.#AP7800a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PTK7 gene (Lane 2) (Origene Technologies).

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.





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.



Western blot analysis of CCK4 (arrow) using rabbit polyclonal CCK4 Antibody (N-term) (Cat.#AP7800a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PTK7 gene (Lane 2) (Origene Technologies).

Citations

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

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