10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LMTK2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7140a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8IWU2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB8233
Calculated MW	164900
Antigen Region	70-100

Additional Information

Gene ID	22853
Other Names	Serine/threonine-protein kinase LMTK2, Apoptosis-associated tyrosine kinase 2, Brain-enriched kinase, hBREK, CDK5/p35-regulated kinase, CPRK, Kinase/phosphatase/inhibitor 2, Lemur tyrosine kinase 2, Serine/threonine-protein kinase KPI-2, LMTK2, AATYK2, BREK, KIAA1079, KPI2, LMR2
Target/Specificity	This LMTK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 70-100 amino acids from the N-terminal region of human LMTK2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	LMTK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LMTK2
Synonyms	AATYK2, BREK, KIAA1079, KPI2, LMR2

Function	Phosphorylates PPP1C, phosphorylase b and CFTR.
Cellular Location	Membrane; Multi- pass membrane protein
Tissue Location	Mainly expressed in skeletal muscle, and weakly in brain and pancreas.

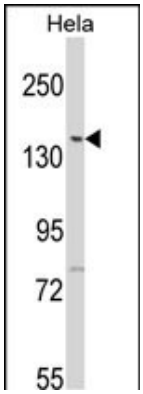
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

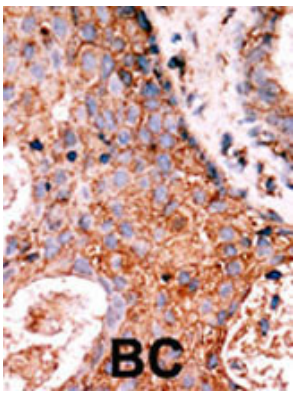
References

Kawa, S., et al., Genes Cells 9(3):219-232 (2004).
Hillier, L.W., et al., Nature 424(6945):157-164 (2003).
Scherer, S.W., et al., Science 300(5620):767-772 (2003).
Kesavapany, S., et al., J. Neurosci. 23(12):4975-4983 (2003).
Wang, H., et al., J. Biol. Chem. 277(51):49605-49612 (2002).

Images



Western blot analysis of LTK2 N-term (Cat. #AP7140a) in Hela cell line lysates (35ug/lane). LTK2 (arrow) was detected using the purified Pab.



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.

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