LKB1

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	mouse anti human
CLONE NAME:	LEY37D
PROTEIN:	Serine/Threonine protein kinase 11
PROTEIN WEB:	http://www.ncbi.nlm.nih.gov/protein/NP_000446.1
ANTIGEN USED:	MBP-LKB1 (full length protein)
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG2b
SPECIES REACTIVITY:	Human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze

DESCRIPTION

This gene, which encodes a member of the serine/threonine kinase family, regulates cell polarity and functions as a tumor suppressor. Mutations in this gene have been associated with Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gastrointestinal tract, pigmented macules on the skin and mouth, and other neoplasms. [provided by RefSeq, Jul 2008].

PUBLICATION DESCRIBING ANTIBODY CHARACTERIZATION/VALIDATION

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Wencheng Zhang, Qilong Wang, Ping Song, Ming-Hui Zou. Liver kinase b1 is required for white adipose tissue growth and differentiation. Diabetes. 1 July 2013.
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Nicolas Humbert, Naveenan Navaratnam, Arnaud Augert, Marco Da Costa, Sébastien Martien, Jing Wang, Dolores Martinez, Corinne Abbadie, David Carling, Yvan de Launoit, Jesús Gil, David Bernard. Regulation of ploidy and senescence by the AMPK-related kinase NUAK1.The EMBO Journal. 20 January 2010.

Xiuyun Hou, Shanqin Xu, Karlene A Maitland-Toolan, Kaori Sato, Bingbing Jiang, Yasuo Ido, Fan Lan, Kenneth Walsh, Michel Wierzbicki, Tony J Verbeuren, Richard A Cohen, Mengwei Zang. SIRT1 regulates hepatocyte lipid metabolism through activating AMP-activated protein kinase. The Journal of Biological Chemistry. 18 July 2008.

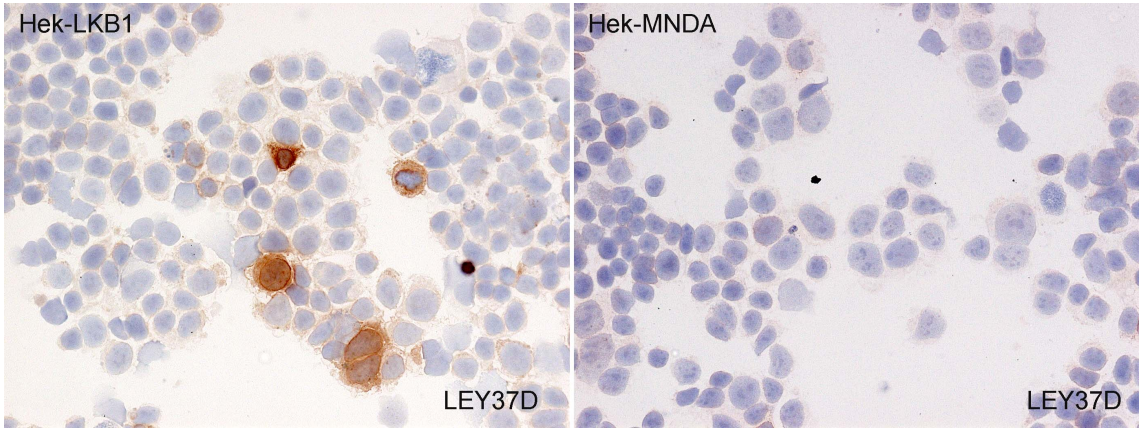
Ping Song, Zhonglin Xie, Yong Wu, Jian Xu, Yunzhou Dong, Ming-Hui Zou. Protein kinase Czeta-dependent LKB1 serine 428 phosphorylation

increases LKB1 nucleus export and apoptosis in endothelial cells. The Journal of Biological Chemistry. 2 May 2008.

István Vadász, Laura A Dada, Arturo Briva, Humberto E Trejo, Lynn C Welch, Jiwang Chen, Peter T Toth, Emilia Lecuona, Lee A Witters, Paul T Schumacker, Navdeep S Chandel, Werner Seeger, Jacob I Sznajder. AMP-activated protein kinase regulates CO2-induced alveolar epithelial dysfunction in rats and human cells by promoting Na,K-ATPase endocytosis. Journal of Clinical Investigation. 1 February 2008.

APPLICATIONS

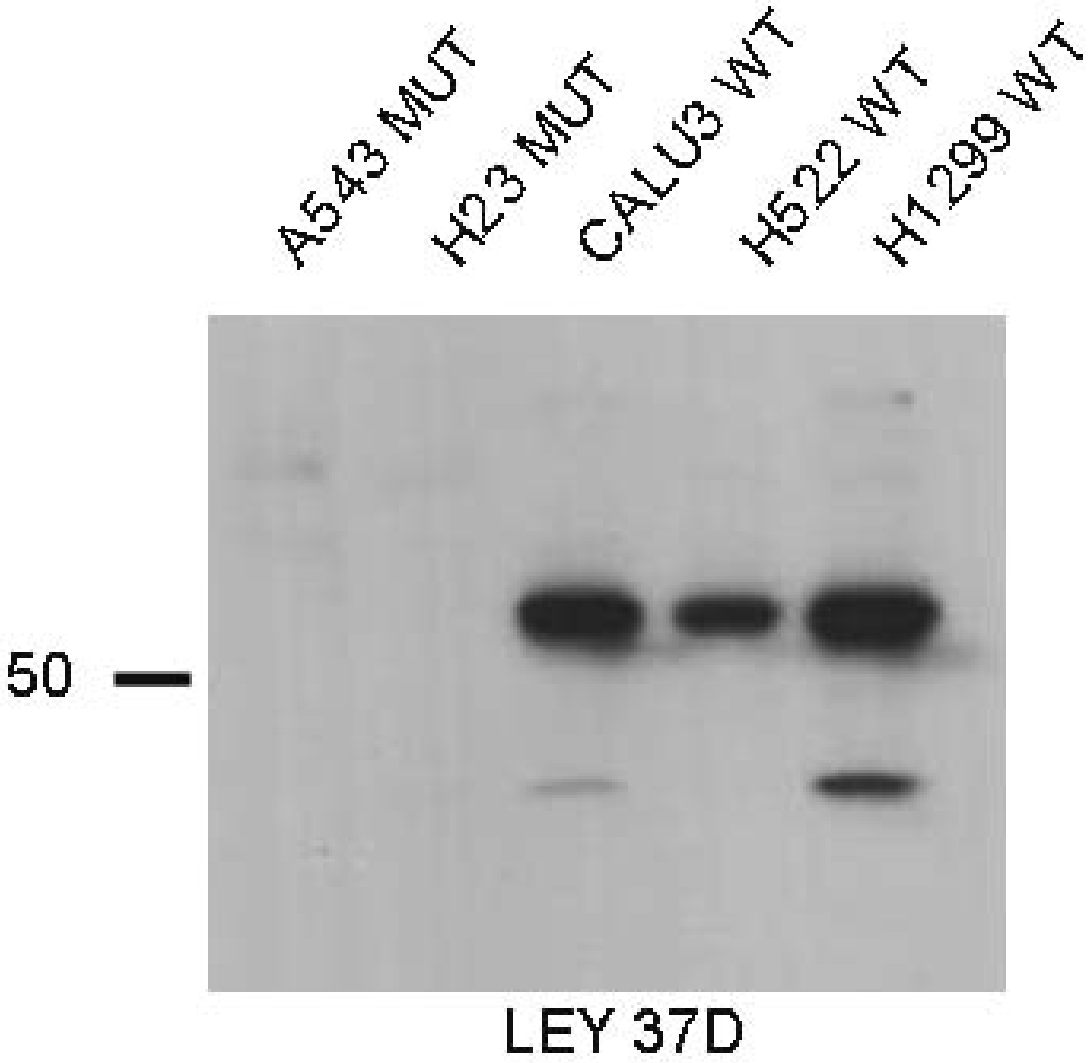
IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytospins									
Recommended	LEY37D	neat supernatant							
Paraffin tissue									
Immunofluorescence									



LKB1 antibody (LEY37D) in transfected cells

LKB1 staining in transfected HEK293T/LKB1 cells. HEK293T/MNDA transfected cells were used as a negative control.

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	LEY37D	0.0002mg/ml						
Immunoprecipitation								



LEY37D mAb is able to detect human LKB1 protein by WB.

Lane 1 A543 MUT cell line (100ug) (-)

Lane 2 H23 MUT cell line (100ug) (-)

Lane 3 CALU3 WT cell line (100ug) (+)

Lane 4 H522 WT cell line (100ug) (+)

Lane 5 H1299 WT cell line (100ug) (+)