LKB1 | Validation File

TARGET LKB1
CLONE NAME LEY37D
DESCRIPTION mouse monoclonal
ANTIGEN USED MBP-LKB1 (full-length protein)
ISOTYPE IgG2b
SPECIES REACTIVITY human
LOCALIZATION cytoplasmic
POSITIVE CONTROL breast
STORAGE BUFFER Tissue culture supernatant: 0.02% sodium azide
STORAGE Aliquot and store at 4C. Do not freeze

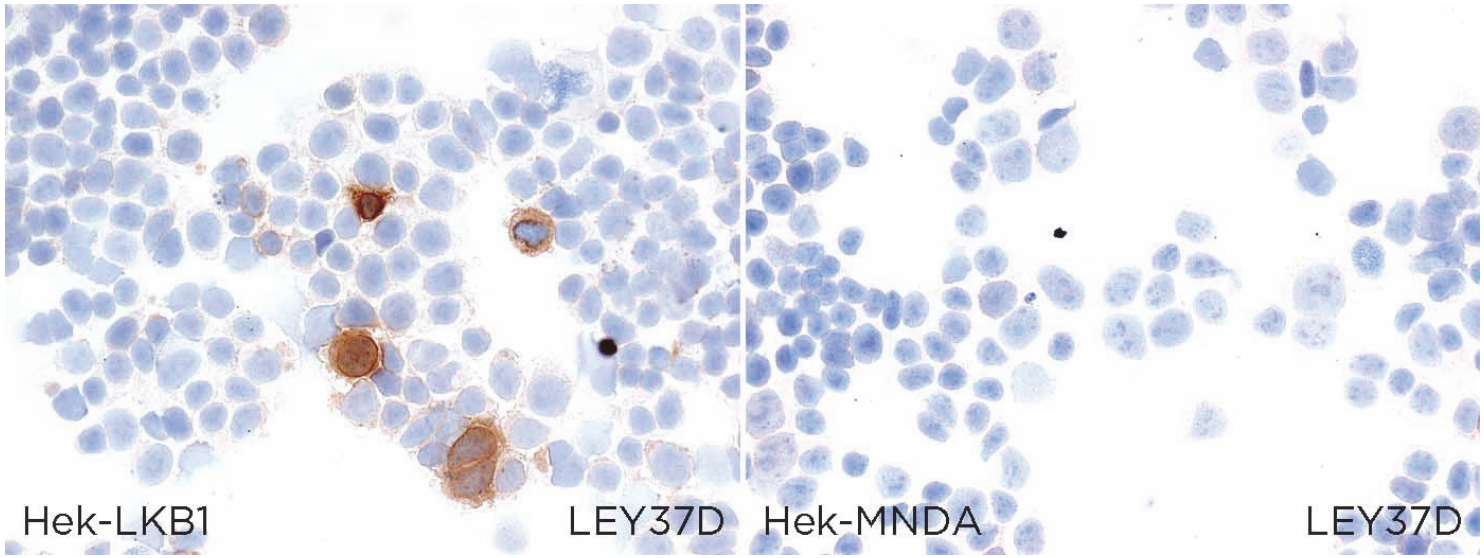
Recommended Inconclusive Not Recommended Not Tested

APPLICATIONS

| ICC | ***Immunocytochemistry***

LEY37D is able to detect human LKB1 protein in immunocytochemistry

To confirm that LEY37D mAb recognizes human LKB1 protein, immunocytochemistry on frozen cytospin preparations of human LKB1 expressed in HEK293T was performed. Cytospin preparation of human MNDA protein was used as a negative control.



| WB | ***Western Blotting***

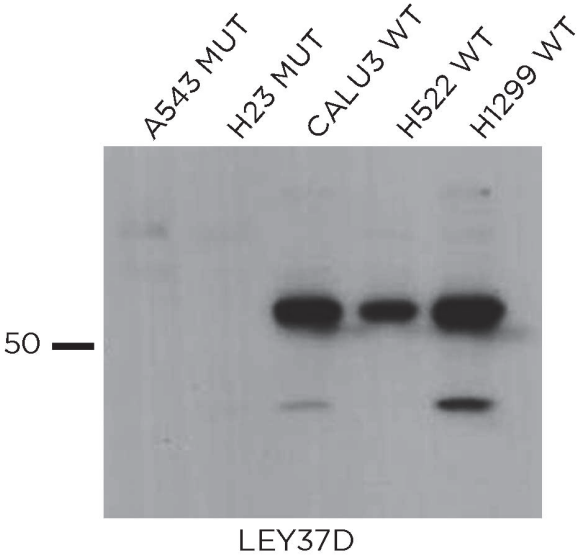
LEY37D mAb is able to detect human LKB1 protein by WB.

DILUTION 1:2000 (purified antibody 1mg/ml)

Predicted molecular weight: ***48kDa***
Observed molecular weight: ***55kDa***

LANES

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) (+)



LEY37D

| IHC-F | ***Immunohistochemistry (frozen)*** Not Tested

| IHC-P | ***Immunohistochemistry (paraffin)*** Not Tested

| IF | ***Immunofluorescence (paraffin)*** Not Recommended

| FC | ***Flow Cytometry*** Not Tested

| IP | ***Immunoprecipitation*** Not Tested

SOLD BY: Abcam, Sigma, Biolegend and Santa Cruz

REFERENCES (more than 90 citations)

Carretero J, Medina PP, Blanco R, Smit L, Tang M, Roncador G, Maestre L, Conde E, López-Ríos F, Clevers HC and Sánchez-Céspedes M. Dysfunctional AMPK activity, signalling through mTOR and survival in response to energetic stress in LKB1-deficient lung cancer. Oncogene. 2007 Mar 8;26(11):1616-25.

Katia Bouchekioua-Bouzaghou, Coralie Poulard, Juliette Rambaud, Emilie Lavergne, Nader Hussein, Marc Billaud, Thomas Bachelot, Sylvie Chabaud, Sylvie Mader, Guila Dayan, Isabelle Treilleux, Laura Corbo, Muriel Le Romancer. LKB1 when associated with methylatedERα is a marker of bad prognosis in breast cancer. International Journal of Cancer. 15 September 2014.

Shu-Fang Jian, Chang-Chun Hsiao, Shin-Yi Chen, Ching-Chieh Weng, Tzu-Lei Kuo, Deng-Chyang Wu, Wen-Chun Hung, Kuang-Hung Cheng. Utilization of liquid chromatography mass spectrometry analyses to identify LKB1-APC interaction in modulating Wnt/β-catenin pathway of lung cancer cells. Molecular Cancer Research. 1 April 2014.

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.

Jinrong Fu, Jing Jin, Robert H Cichewicz, Serena A Hageman, Trevor K Ellis, Lan Xiang, Qi Peng, Mali Jiang, Nicolas Arbez, Katelyn Hotaling, Christopher A Ross, Wenzhen Duan. trans-(-)-ε-Viniferin increases mitochondrial sirtuin 3 (SIRT3), activates AMP-activated protein kinase (AMPK), and protects cells in models of Huntington Disease.The Journal of Biological Chemistry. 13 July 2012.

Ahmed F Salem, Diana Whitaker-Menezes, Zhao Lin, Ubaldo E Martinez-Outschoorn, Herbert B Tanowitz, Mazhar Salim Al-Zoubi, Anthony Howell, Richard G Pestell, Federica Sotgia, Michael P Lisanti. Two-compartment tumor metabolism: autophagy in the tumor microenvironment and oxidative mitochondrial metabolism (OXPHOS) in cancer cells.Cell Cycle. 1 July 2012.

Badal C Roy, Takashi Kohno, Reika Iwakawa, Tetsuo Moriguchi, Tohru Kiyono, Kazuhiro Morishita, Montse Sánchez-Céspedes, Tetsu Akiyama, Jun Yokota. Involvement of LKB1 in epithelial-mesenchymal transition (EMT) of human lung cancer cells. Lung Cancer. 1 November 2010.

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.