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

Mouse Vrk2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17443b

Product Information

Application	WB, E
Primary Accession	Q8BN21
Other Accession	NP_081536.2
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37160
Calculated MW	58119
Antigen Region	354-381

Additional Information

Gene ID	69922
Other Names	Serine/threonine-protein kinase VRK2, Vaccinia-related kinase 2, Vrk2
Target/Specificity	This Mouse Vrk2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 354-381 amino acids from the C-terminal region of mouse Vrk2.
Dilution	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	Mouse Vrk2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Vrk2
Function	Serine/threonine kinase that regulates several signal transduction pathways (PubMed:14645249). Modulates the stress response to hypoxia and cytokines, such as interleukin-1 beta (IL1B) and this is dependent on its interaction with MAPK8IP1, which assembles mitogen- activated protein kinase (MAPK)

	complexes (By similarity). Inhibition of signal transmission mediated by the assembly of MAPK8IP1-MAPK complexes reduces JNK phosphorylation and JUN-dependent transcription (By similarity). Phosphorylates histone H3 (By similarity). Phosphorylates 'Thr-18' of p53/TP53, and thereby increases its stability and activity (By similarity). Phosphorylates BANF1 and disrupts its ability to bind DNA and reduces its binding to LEM domain- containing proteins (By similarity). Down-regulates the transactivation of transcription induced by ERBB2, HRAS, BRAF, and MEK1 (By similarity). Blocks the phosphorylation of ERK in response to ERBB2 and HRAS (By similarity). May also phosphorylate MAPK8IP1 (By similarity). Can also phosphorylate the following substrates that are commonly used to establish in vitro kinase activity: casein, MBP and histone H2B, but it is not sure that this is physiologically relevant (By similarity).
Cellular Location	Cytoplasm. Endoplasmic reticulum membrane; Single- pass type IV membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:Q86Y07}; Single-pass type IV membrane protein. Nucleus envelope
Tissue Location	Expressed in liver, kidney and muscle. Weakly expressed in thymus, bone marrow and spleen

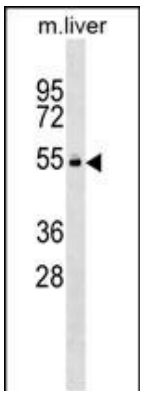
Background

Probable serine/threonine kinase (By similarity).

References

Bailey, P.J., et al. Exp. Cell Res. 312(16):3108-3119(2006)
Wang, S., et al. PLoS Genet. 2 (2), E15 (2006) :
Nichols, R.J., et al. J. Biol. Chem. 279(9):7934-7946(2004)
Vega, F.M., et al. FEBS Lett. 544 (1-3), 176-180 (2003) :
Agoulnik, A.I., et al. Hum. Mol. Genet. 11(24):3047-3053(2002)

Images



Mouse Vrk2 Antibody (C-term) (Cat. #AP17443b) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the Vrk2 antibody detected the Vrk2 protein (arrow).