

Mouse Vrk2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17443b

Specification

Mouse Vrk2 Antibody (C-term) - Product Information

Application WB,E **Primary Accession 08BN21** NP 081536.2 Other Accession Reactivity Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 58119 Antigen Region 354-381

Mouse Vrk2 Antibody (C-term) - 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

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.

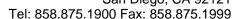
Precautions

Mouse Vrk2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Vrk2 Antibody (C-term) - Protein Information

Name Vrk2

Function Serine/threonine kinase that regulates several signal transduction pathways (PubMed: <u>14645249</u>). 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 INK phosphorylation and IUN-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

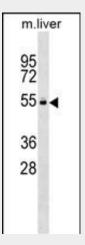
Expressed in liver, kidney and muscle. Weakly expressed in thymus, bone marrow and spleen

Mouse Vrk2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

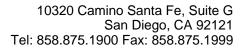
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Mouse Vrk2 Antibody (C-term) - 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).

Mouse Vrk2 Antibody (C-term) - Background





Probable serine/threonine kinase (By similarity).

Mouse Vrk2 Antibody (C-term) - 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)