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Mouse Vrk2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17443b

Specification

Mouse Vrk2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8BN21

Mouse Vrk2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 69922

Other Names
Serine/threonine-protein kinase VRK2, Vaccinia-related kinase 2, Vrk2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Vrk2 Antibody (C-term) Blocking Peptide - 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

Mouse Vrk2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse Vrk2 Antibody (C-term) Blocking Peptide - Images

Mouse Vrk2 Antibody (C-term) Blocking Peptide - Background

Probable serine/threonine kinase (By similarity).

Mouse Vrk2 Antibody (C-term) Blocking Peptide - 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)