

#3260 Store at -20°C

VRK3 Antibody



✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
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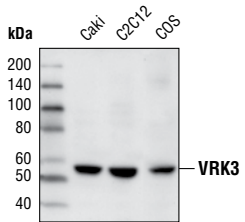
rev. 04/07/10

This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #51231
Swiss-Prot Acc. #Q8IV63

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	54 kDa	Rabbit**

Background: The vaccinia-related kinase (VRK) proteins are a new group of Ser/Thr kinases in the human kinome. This mammalian kinase family comprises three members, VRK1, VRK2, and VRK3 (1-3). The VRK1 has autophosphorylation activity and phosphorylates several transcription factors, including p53 (4), ATF2 (5), and c-Jun (6). VRK2 is associated with the endoplasmic reticulum (7). VRK3 suppresses ERK activity through direct interaction and activation of the MAP kinase phosphatase VHR (8). Further functional and structural analysis of VRK proteins will elucidate important new aspects of cell regulation.



Western blot analysis of extracts from Caki, C2C12 and COS cells using VRK3 Antibody.

Specificity/Sensitivity: VRK3 Antibody detects endogenous levels of total VRK3 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human VRK3. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Nezu, J. et al. (1997) *Genomics* 45, 327-31.
- (2) Zelko, I. et al. (1998) *Arch Biochem Biophys* 352, 31-6.
- (3) Vega, F.M. et al. (2003) *FEBS Lett* 544, 176-80.
- (4) Lopez-Borges, S. and Lazo, P.A. (2000) *Oncogene* 19, 3656-64.
- (5) Sevilla, A. et al. (2004) *J Biol Chem* 279, 27458-65.
- (6) Sevilla, A. et al. (2004) *Oncogene* 23, 8950-8.
- (7) Nichols, R.J. and Traktman, P. (2004) *J Biol Chem* 279, 7934-46.
- (8) Kang, T.H. and Kim, K.T. (2006) *Nat Cell Biol* 8, 863-9.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.