

DATASHEET

VRK3 Rabbit Polyclonal Antibody

CAT. NO. APA10984

KEY FEATURES

Target	VRK3	Source / Host	Rabbit
Reactivity	Human, Rat	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

BACKGROUND

Plays a role in the regulation of the cell cycle by phosphorylating the nuclear envelope protein barrier-to-autointegration factor/BAF that is required for disassembly and reassembly, respectively, of the nuclear envelope during mitosis . Under normal physiological conditions, negatively regulates ERK activity along with VHR/DUSP3 phosphatase in the nucleus, causing timely and transient action of ERK. Stress conditions activate CDK5 which phosphorylates VRK3 to increase VHR phosphatase activity and suppress prolonged ERK activation that causes cell death . For example, upon glutamate induction, promotes nuclear localization of HSP70/HSPA1A to inhibit ERK activation via VHR/DUSP3 phosphatase .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:100

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to VRK3
Specificity	Recognizes endogenous levels of VRK3 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human VRK3. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 52 kD; Observed: 53 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Inactive serine/threonine-protein kinase VRK3; Serine/threonine-protein pseudokinase VRK3; Vaccinia-related kinase 3
Gene Symbol	VRK3
Entrez Gene	51231(Human)
SwissProt	Q8IV63(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

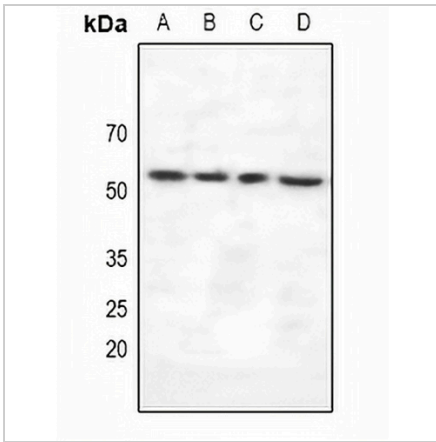
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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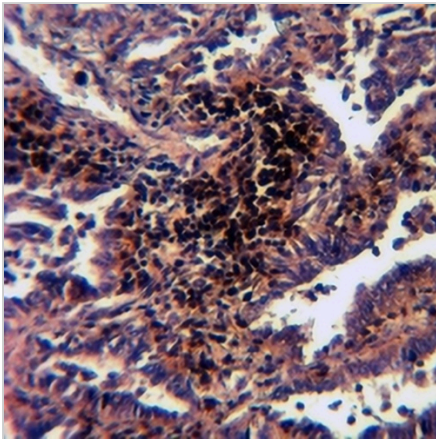
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DATA



Western blot analysis of VRK3 expression in HEK293T (A), A549 (B), U87MG (C), rat liver (D) whole cell lysates. (Predicted band size: 52 kD; Observed band size: 53 kD)



Immunohistochemical analysis of VRK3 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.