

Anti-VRK3 Antibody
Rabbit polyclonal antibody to VRK3
Catalog # AP61120**Specification**

Anti-VRK3 Antibody - Product Information

Application	WB
Primary Accession	Q8IV63
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52881

Anti-VRK3 Antibody - Additional Information**Gene ID** 51231**Other Names**

Inactive serine/threonine-protein kinase VRK3; Serine/threonine-protein pseudokinase VRK3; Vaccinia-related kinase 3

Target/Specificity

Recognizes endogenous levels of VRK3 protein.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-VRK3 Antibody - Protein Information**Name** VRK3**Function**

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 (PubMed:25899223). 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 (PubMed:27346674). For example,

upon glutamate induction, promotes nuclear localization of HSP70/HSPA1A to inhibit ERK activation via VHR/DUSP3 phosphatase (PubMed:27941812).

Cellular Location

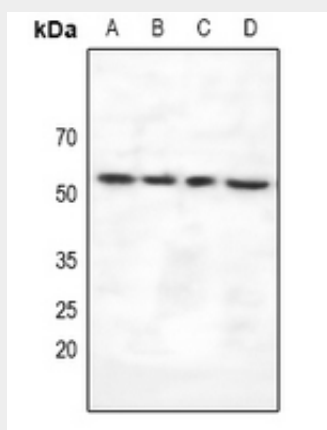
Nucleus. Cytoplasm. Note=Under oxidative stress, migrates from the nucleus to the cytoplasm.

Anti-VRK3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-VRK3 Antibody - Images



Western blot analysis of VRK3 expression in HEK293T (A), A549 (B), U87MG (C), rat liver (D) whole cell lysates.

Anti-VRK3 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human VRK3. The exact sequence is proprietary.