

VRK2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54966**Specification****VRK2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	Q86Y07
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58141

VRK2 Polyclonal Antibody - Additional Information**Gene ID** 7444**Other Names**

Serine/threonine-protein kinase VRK2, 2.7.11.1, Vaccinia-related kinase 2, VRK2

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

VRK2 Polyclonal Antibody - Protein Information**Name** VRK2**Function**

Serine/threonine kinase that regulates several signal transduction pathways (PubMed:16704422, PubMed:14645249, PubMed:16495336, PubMed:17709393, PubMed:18617507, PubMed:18286207, PubMed:20679487). Isoform 1 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 (PubMed:17709393). Inhibition of signal transmission mediated by the assembly of MAPK8IP1-MAPK complexes reduces JNK phosphorylation and JUN-dependent transcription (PubMed:18286207). Phosphorylates 'Thr-18' of p53/TP53, histone H3, and may also phosphorylate MAPK8IP1 (PubMed:16704422).

Phosphorylates BANF1 and disrupts its ability to bind DNA and reduces its binding to LEM domain-containing proteins (PubMed:16495336). Down-regulates the transactivation of transcription induced by ERBB2, HRAS, BRAF, and MEK1 (PubMed:20679487). Blocks the phosphorylation of ERK in response to ERBB2 and HRAS (PubMed:20679487). 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 (PubMed:14645249).

Cellular Location

[Isoform 1]: Cytoplasm. Endoplasmic reticulum membrane; Single-pass type IV membrane protein. Mitochondrion membrane; Single-pass type IV membrane protein. Nucleus envelope {ECO:0000250|UniProtKB:Q8BN21}

Tissue Location

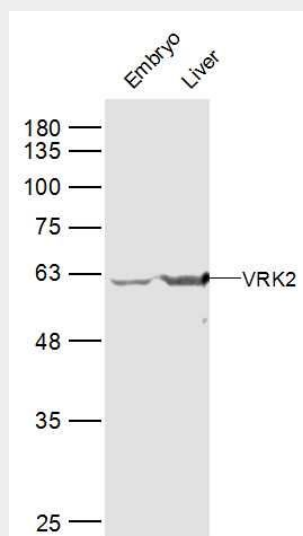
Isoform 1 and isoform 2 are expressed in various tumor cell lines. Expression of isoform 1 inversely correlates with ERBB2 in breast carcinomas (at protein level). Widely expressed. Highly expressed in fetal liver, skeletal muscle, pancreas, heart, peripheral blood leukocytes and testis.

VRK2 Polyclonal 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](#)

VRK2 Polyclonal Antibody - Images



Sample:

Embryo (Mouse) Lysate at 40 ug
Liver (Mouse) Lysate at 40 ug
Primary: Anti-VRK2 (bs-12780R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 58 kD
Observed band size: 58 kD