

## **GLK Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8005B

## Specification

# **GLK Antibody (C-term) - Product Information**

Application Primary Accession Reactivity	WB, IHC-P,E <u>Q8IVH8</u> Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	101316
Antigen Region	423-453

## **GLK Antibody (C-term) - Additional Information**

#### Gene ID 8491

#### **Other Names**

Mitogen-activated protein kinase kinase kinase kinase 3, Germinal center kinase-related protein kinase, GLK, MAPK/ERK kinase kinase kinase 3, MEK kinase kinase 3, MEK kinase 3, MEKKK 3, MAP4K3, RAB8IPL1

#### Target/Specificity

This GLK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 423-453 amino acids from the C-terminal region of human GLK.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

GLK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GLK Antibody (C-term) - Protein Information**

Name MAP4K3 (HGNC:6865)

Synonyms RAB8IPL1



**Function** Serine/threonine kinase that plays a role in the response to environmental stress. Appears to act upstream of the JUN N-terminal pathway (PubMed:<u>9275185</u>). Activator of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. MAP4Ks act in parallel to and are partially redundant with STK3/MST2 and STK4/MST2 in the phosphorylation and activation of LATS1/2, and establish MAP4Ks as components of the expanded Hippo pathway (PubMed:<u>26437443</u>).

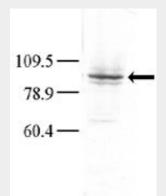
#### **Tissue Location**

Ubiquitously expressed in all tissues examined, with high levels in heart, brain, placenta, skeletal muscle, kidney and pancreas and lower levels in lung and liver

## **GLK Antibody (C-term) - Protocols**

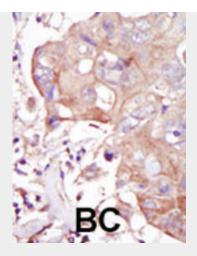
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- GLK Antibody (C-term) Images



Western blot analysis of anti-GLK Pab (Cat. #AP8005b) in Hela cell lysate. Dilution for anti-GLK was 1:100; dilution for secondary goat anti-rabbit-HRP was 1:7000. A chemiluminescent kit was used for development of the Western blot. Data and protocol courtesy of Dr. Richard Lu, Partners HealthCare System at Harvard University.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# GLK Antibody (C-term) - Background

GLK is a member of the Ste20 family of serine/threonine protein kinases. The protein belongs to the subfamily that consists of members, such as germinal center kinase (GCK), that are characterized by an N-terminal catalytic domain and C-terminal regulatory domain. The kinase activity of the encoded protein can be stimulated by UV radiation and tumor necrosis factor-alpha. The protein specifically activates the c-Jun N-terminal kinase (JNK) signaling pathway. Evidence suggests that it functions upstream of mitogen-activated protein kinase kinase kinase 1 (MEKK1). This gene previously was referred to as RAB8-interacting protein-like 1 (RAB8IPL1), but it has been renamed mitogen-activated protein kinase kinase kinase 3 (MAP4K3).

## **GLK Antibody (C-term) - References**

Diener, K., et al., Proc. Natl. Acad. Sci. U.S.A. 94(18):9687-9692 (1997).