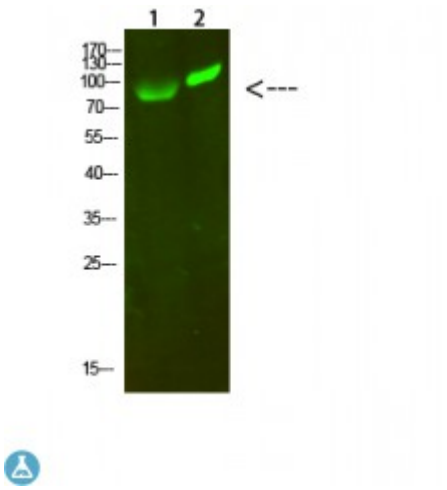
Anti-GCK/GLK antibody



Description	Rabbit polyclonal to GCK/GLK.

Model	STJ99334
Host	Rabbit
Reactivity	Human, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human GCK/GLK.
Immunogen Region	221-270aa
Gene ID	5871
Gene Symbol	MAP4K2
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	GCK/GLK Polyclonal Antibody detects endogenous levels of GCK/GLK.
Tissue Specificity	Highly expressed in germinal center but not mantle zone B-cells. Also expressed in lung, brain and placenta and at lower levels in other tissues examined.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Mitogen-activated protein kinase kinase kinase kinase 2 B lymphocyte serine/threonine-protein kinase Germinal center kinase GC kinase MAPK/ERK kinase kinase kinase 2 MEK kinase kinase 2 MEKKK 2 Rab8-interacting pr

Molecular Weight	100kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6864OMIM:603166
Alternative Names	Mitogen-activated protein kinase kinase kinase kinase 2 B lymphocyte serine/threonine-protein kinase Germinal center kinase GC kinase MAPK/ERK kinase kinase kinase 2 MEK kinase kinase 2 MEKKK 2 Rab8-interacting pr
Function	Serine/threonine-protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Acts as a MAPK kinase kinase kinase (MAP4K) and is an upstream activator of the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway and to a lesser extent of the p38 MAPKs signaling pathway. Required for the efficient activation of JNKs by TRAF6-dependent stimuli, including pathogen-associated molecular patterns (PAMPs) such as polyinosine-polycytidine (poly(IC)), lipopolysaccharides (LPS), lipid A, peptidoglycan (PGN), or bacterial flagellin. To a lesser degree, IL-1 and engagement of CD40 also stimulate MAP4K2-mediated JNKs activation. The requirement for MAP4K2/GCK is most pronounced for LPS signaling, and extends to LPS stimulation of c-Jun phosphorylation and induction of IL-8. Enhances MAP3K1 oligomerization, which may relieve N-terminal mediated MAP3K1 autoinhibition and lead to activation following autophosphorylation. Mediates also the SAP/JNK signaling pathway and the p38 MAPKs signaling pathway through activation of the MAP3Ks MAP3K10/MLK2 and MAP3K11/MLK3. May play a role in the regulation of vesicle targeting or fusion. regulation of vesicle targeting or fusion.
Sequence and Domain Family	The PEST domains are Pro-, Glu-, Ser-, and Thr-rich domains. Proteins with PEST domains are frequently targets of degradation by the ubiquitin proteasome.
Cellular Localization	Cytoplasm Basolateral cell membrane Golgi apparatus membrane
Post-translational Modifications	Polyubiquitinated through 'Lys-48'-polyubiquitin chains, allowing proteasomal turnover. Ubiquitination requires the kinase activity of MAP4K2/GCK. Autophosphorylated in response to tumor necrosis factor (TNF), endotoxins or proinflammatory stimuli. Autophosphorylation leads to activation.