

Anti-MK04 antibody



Description Unconjugated Rabbit polyclonal to MK04

Model STJ190195

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, WB

Immunogen Synthesized peptide derived from human MK04 protein.

Immunogen Region 410-490aa

Gene ID <u>5596</u>

Gene Symbol MAPK4

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity MK04 Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity High expression in heart and brain.

Purification MK04 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 4 MAP kinase 4 MAPK 4 Extracellular

signal-regulated kinase 4 ERK-4 MAP kinase isoform p63 p63-MAPK

Molecular Weight 64 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:6878OMIM:176949</u>

Alternative Names Mitogen-activated protein kinase 4 MAP kinase 4 MAPK 4 Extracellular

signal-regulated kinase 4 ERK-4 MAP kinase isoform p63 p63-MAPK

Function Atypical MAPK protein. Phosphorylates microtubule-associated protein 2

(MAP2) and MAPKAPK5. The precise role of the complex formed with MAPKAPK5 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPKAPK5,

ERK4/MAPK4 is phosphorylated at Ser-186 and then mediates

phosphorylation and activation of MAPKAPK5, which in turn phosphorylates

ERK4/MAPK4. May promote entry in the cell cycle.

Sequence and Domain Family The FRIEDE motif is required for docking MAPKAPK5. In contrast to

classical MAPKs, the TXY motif within the activation loop is replaced by the

SEG motif, whose phosphorylation activates the MAP kinases.

Cellular Localization Cytoplasm Nucleus. Translocates to the cytoplasm following interaction with

MAPKAPK5.

Post-translational

Modifications

Phosphorylated at Ser-186 by PAK1, PAK2 and PAK3 resulting in catalytic

activation. Phosphorylated by MAPKAPK5 at other sites.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com