10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



Phospho-MEK4 (Ser80) Rabbit mAb

Catalog # AP76889

Product Information

ApplicationWB, IPPrimary AccessionP45985ReactivityHumanHostRabbit

Clonality Monoclonal Antibody

Calculated MW 44288

Additional Information

Gene ID 6416

Other Names MAP2K4

Dilution WB~~1/500-1/1000 IP~~1/20

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Protein Information

Name MAP2K4

Synonyms JNKK1, MEK4, MKK4, PRKMK4, SEK1, SERK1,

Function Dual specificity protein kinase which acts as an essential component of the

MAP kinase signal transduction pathway. Essential component of the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. With MAP2K7/MKK7, is the one of the only known kinase to directly

activate the stress-activated protein kinase/c-Jun N-terminal kinases MAPK8/JNK1, MAPK9/JNK2 and MAPK10/JNK3. MAP2K4/MKK4 and

MAP2K7/MKK7 both activate the JNKs by phosphorylation, but they differ in their preference for the phosphorylation site in the Thr-Pro-Tyr motif.

MAP2K4 shows preference for phosphorylation of the Tyr residue and MAP2K7/MKK7 for the Thr residue. The phosphorylation of the Thr residue by MAP2K7/MKK7 seems to be the prerequisite for JNK activation at least in response to pro-inflammatory cytokines, while other stimuli activate both MAP2K4/MKK4 and MAP2K7/MKK7 which synergistically phosphorylate JNKs. MAP2K4 is required for maintaining peripheral lymphoid homeostasis. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling

pathway, including the release cytochrome c, leading to apoptosis. Whereas

MAP2K7/MKK7 exclusively activates JNKs, MAP2K4/MKK4 additionally activates the p38 MAPKs MAPK11, MAPK12, MAPK13 and MAPK14.

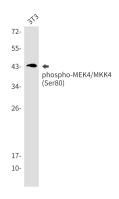
Cellular Location

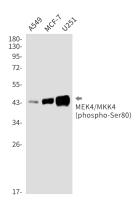
Cytoplasm. Nucleus.

Tissue Location

Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues

Images





Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.