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EB11929 - Goat Anti-MK2 / MAPKAPK2 Antibody

Size: 100µg specific antibody in 200µl

Target Protein

Principal Names: MAPKAPK2, mitogen-activated protein kinase-activated protein kinase 2, MAPKAP-K2, MK-2, MK2, MAP kinase-activated protein kinase 2, MAPK-activated protein kinase 2, MAPKAP kinase 2
Official Symbol: MAPKAPK2
Accession Number(s): NP_004750.1; NP_116584.2
Human GeneID(s): 9261
Non-Human GeneID(s): 17164 (mouse), 289014 (rat)
Important Comments: This antibody is expected to recognize both reported isoforms (NP_004750.1; NP_116584.2).

Immunogen

Peptide with sequence C-SRVLKEDKERWED, from the internal region (near C Terminus) of the protein sequence according to NP_004750.1; NP_116584.2.

Please note the peptide is available for sale.

Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.
Aliquot and store at -20°C. Minimize freezing and thawing.

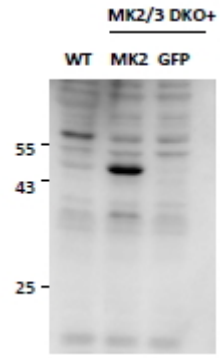
Applications Tested

Peptide ELISA: antibody detection limit dilution 1:128000.
Western blot: Approx 60kDa band observed in Mouse Embryonic Fibroblasts (MEF) lysates, not present in the knockout MEFs and reappearing as a 45kDa band upon reintroduction of MK2 gene expression through viral transduction (calculated MW of 44.0kDa according to Mouse NP_032577.1). The observed molecular weights correspond to earlier findings in literature with different antibodies (Menon et al, Cell Motil Cytoskeleton. 2009 Dec;66(12):1041-7. PMID: 19743408). There is no cross-reactivity to MK5. Data obtained from Dr. M. B. Menon, Inst. Biochemistry, Hannover Medical School, Germany. Recommended concentration: 0.5-2µg/ml.
IHC: Paraffin embedded Human Heart. Recommended concentration: 5µg/ml.

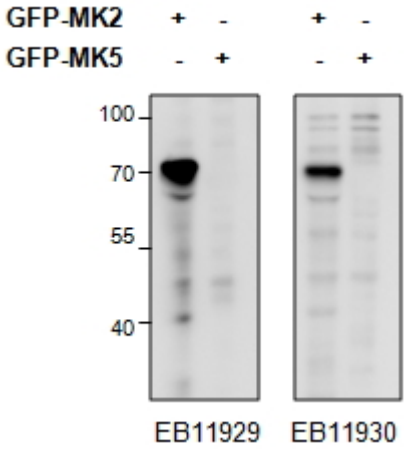
Immunoprecipitation: MK2/MK3 double knockout MEFs retrovirally transduced wiith MK2 or empty vector were lysed from confluent plates and used for IP with 1.5ug EB11929 or EB11930. Western blots of the IP were labelled with rabbit anti-MK2 (CST). An approx 45kDa of MK2 is only precipitated from lysates of those KO MEFs that have been rescued by the MK2 expression construct as described in PMID: 19743408. Data obtained from Dr. M. B. Menon, Inst. Biochemistry, Hannover Medical School, Germany.

Species Reactivity

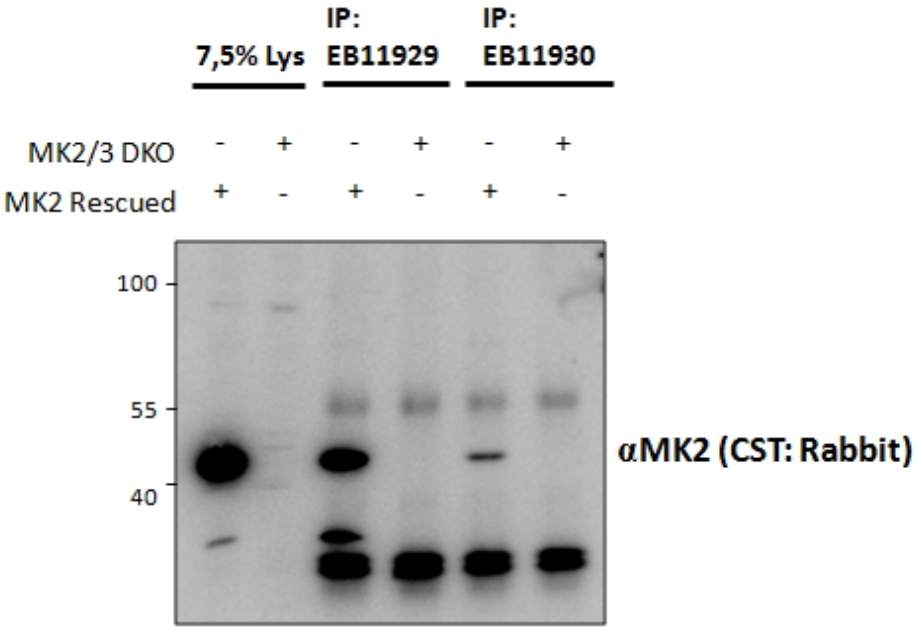
Tested: Human, Mouse
Expected from sequence similarity: Human, Mouse, Rat, Dog, Cow



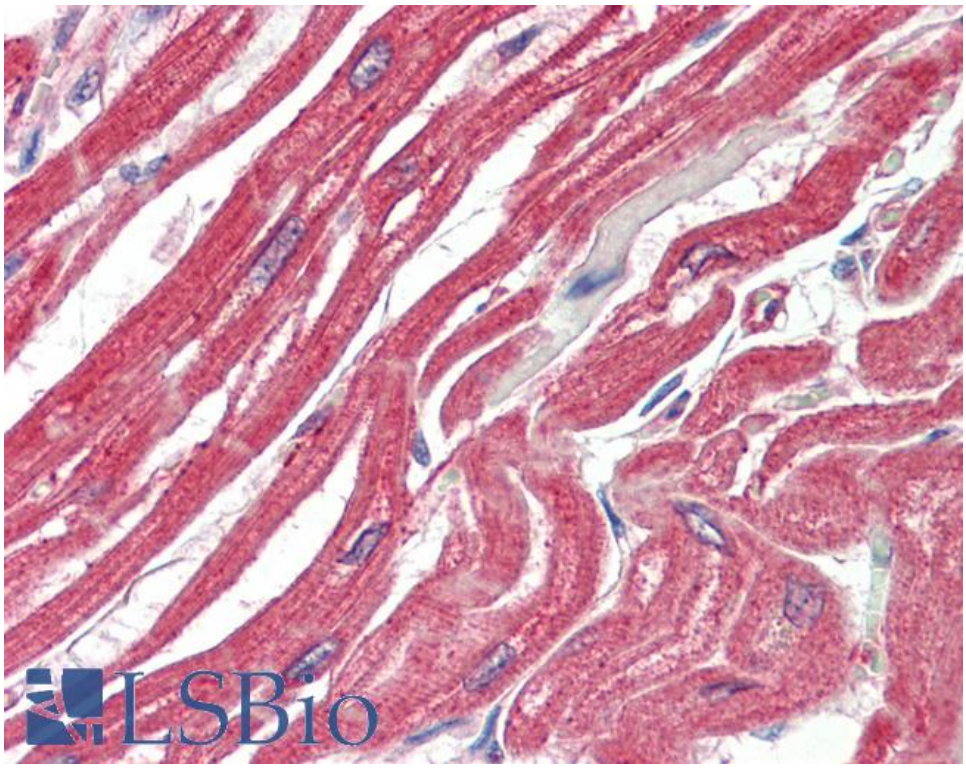
EB11929 (0.5µg/ml) staining of MEF lysates (35µg protein in RIPA buffer), from double KO mice in second and third lanes and rescued by introduction of MK2 gene in second lane. Primary incubation was 2 hour. Detected by chemiluminescence.



HEK293 overexpressing Mouse MK2 fused to GFP or overexpressing MK5 fused to GFP and probed with EB11929 (0.5ug/ml) in the left panel and with EB11930 (0.5ug/ml) in the right panel.



EB11929 and EB11930 (1.5ug) immunoprecipitations from lysates of MK2/MK3 double knockout MEFs, with (third and fifth lanes) and without (fourth and sixth lanes) rescued MK2 expression through retroviral transduction. The corresponding lysates (first and second lane resp.) were analyzed in parallel in this Western blot labelled with rabbit anti-MK2.



EB11929 (5µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer Ph 6, AP-staining.