

Phospho-Ser311, Thr315 MEK5 Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1131

Specification

Phospho-Ser311, Thr315 MEK5 Antibody - Product Information

Application WB
Primary Accession Q62862
Reactivity Rat

Predicted Bovine, Chicken, Human, Mouse, Monkey,

Xenopus, Zebrafish

Host Rabbit
Clonality polyclonal
Calculated MW 49 KDa

Phospho-Ser311, Thr315 MEK5 Antibody - Additional Information

Gene ID 29568
Gene Name MAP2K5

Other Names

Dual specificity mitogen-activated protein kinase kinase 5, MAP kinase kinase 5, MAPKK 5, MAPK/ERK kinase 5, MEK 5, Map2k5, Mek5, Mkk5, Prkmk5

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser311/Thr315 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

Antibody Specificity

Specific for the ~49k MEK5 protein phosphorylated at Ser311, Thr315.Immunolabeling of the MEK5 band is blocked by preadsorption with the phospho-peptide used as antigen but not be the corresponding dephospho-peptide.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser311, Thr315 MEK5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

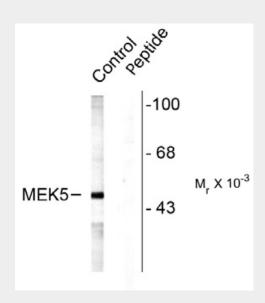


Phospho-Ser311, Thr315 MEK5 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser311, Thr315 MEK5 Antibody - Images



Western blot of rat testes lysate showing specific labeling of the ~49k MEK5 protein (Control). Immunolabeling is blocked by preadsorption with the phospho-peptide used as antigen (Peptide) but not by the corresponding dephospho-peptide (not shown).

Phospho-Ser311, Thr315 MEK5 Antibody - Background

MEK5 (also known as MKK5) is a dual specificity serine/threonine protein kinase belonging to the MAP kinase kinase family. MEK5 has been shown to specifically activate ERK5 (Zhou et al., 1995) whereas MEK5 itself is regulated by MEKK3 (Chao et al., 1999). An important link between MEK5 and metastatic prostrate cancer has been demonstrated (Mehta et.al., 2003). Dual phosphorylation of Ser311 and Thr315 have been implicated in cell proliferation (Cameron et al., 2004).

Phospho-Ser311, Thr315 MEK5 Antibody - References

Zhou G, Bao ZQ, Dixon JE, (1995) Components of a new human protein kinase signal transduction pathway. J. Biol. Chem. 270(21):12665-9.

Chao TH, Hayashi M, Tapping RI, Kato Y, Lee JD (1999) MEKK3 directly regulates MEK5 activity as part of the big mitogen-activated protein kinase 1 (BMK1) signaling pathway. J. Biol. Chem. 274(51):36035-8.

Mehta PB, Jenkins BL, McCarthy L, Thilak L, Robson CN, Neal DE, Leung HY (2003) MEK5 overexpression is associated with metastatic prostrate cancer, and stimulates proliferation, MMP-9 expression and invasion. Oncogene 22(9):1381-9.





Cameron SJ, Abe J, Malik S, Che W, Yang J (2004) Differential role of MEK5alpha and MEK5beta in BMK1/ERK5 activation. J. Biol. Chem. 279(2):1506-12.