MAPK7 (phospho S731/T733) polyclonal antibody

Catalog # PAB15919 Size 100 ug

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of MAPK7.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding S731/T733 of human MAPK7.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Form	Liquid
Recommend Usage	ELISA (1:2000-1:5000) Western Blot (1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (50% glycerol, 0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

Gene Info — MAPK7

Entrez GeneID	5598
Gene Name	MAPK7

Gene Alias	BMK1, ERK4, ERK5, PRKM7
Gene Description	mitogen-activated protein kinase 7
Omim ID	602521
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular pro cesses such as proliferation, differentiation, transcription regulation and development. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is invol ved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracelluar signals, this kinase transloc ates to cell nucleus, where it regulates gene expression by phosphorylating, and activating differe nt transcription factors. Four alternatively spliced transcript variants of this gene encoding two disti nct isoforms have been reported. [provided by RefSeq
Other Designations	BMK1 kinase|OTTHUMP00000065906|big MAP kinase 1|extracellular-signal-regulated kinase 5

Publication Reference

- A novel role of ERK5 in integrin-mediated cell adhesion and motility in cancer cells via Fak signaling.

  Sawhney RS, Liu W, Brattain MG.

  Journal of Cellular Physiology 2009 Apr; 219(1):152.

- ERK5 is a target for gene amplification at 17p11 and promotes cell growth in hepatocellular carcinoma by regulating mitotic entry.

  Zen K, Yasui K, Nakajima T, Zen Y, Zen K, Gen Y, Mitsuyoshi H, Minami M, Mitsufuji S, Tanaka S, Itoh Y, Nakanuma Y, Taniwaki M, Arii S, Okanoue T, Yoshikawa T.

  Genes, Chromosomes & Cancer 2009 Feb; 48(2):109.

- Activation of ERK5 in angiotensin II-induced hypertrophy of human aortic smooth muscle cells.

  Zhao Z, Geng J, Ge Z, Wang W, Zhang Y, Kang W.

  Molecular and Cellular Biochemistry 2008 Nov; 322(1-2):171.

Pathway

- Gap junction
- GnRH signaling pathway

- MAPK signaling pathway
- Neurotrophin signaling pathway

Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema