Product Data Sheet:
p44/p42 MAPK ERK1/ERK2 Polyclonal Antibody

Cat. No:	AB-82379
Conjugate:	Unconjugated
Size:	100 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human p44/42 MAPK. AA range:330-379
Reactivity:	Hu, Ms, Rt
Applications:	Western Blot: 1/500 – 1/2000 Immunofluorescence: 1:50-200 Immunohistochemistry: 1/100 – 1/300
Molecular Weight:	42, 44 kDa
Purification:	Aff. Pur.
Synonyms:	MAPK1; ERK2; PRKM1; PRKM2; Mitogen-activated protein kinase 1; MAP kinase 1; MAPK 1; ERT1; Extracellular signal-regulated kinase 2; ERK-2; MAP kinase isoform p42; p42-MAPK; Mitogen-activated protein kinase 2; MAP kinase 2; MAPK 2; MAPK3; MAPK3; ERK1; PRKM
Background:	Mitogen-activated protein kinases (MAPKs) are a widely conserved family of serine/threonine protein kinases involved in many cellular programs such as cell proliferation, differentiation, motility, and death. The p44/42 MAPK (ERK1/2) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines (1-3) and is an important target in the diagnosis and treatment of cancer (4). Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK or MAP3K), a MAP kinase kinase (MAPKK or MAP2K), and a MAP kinase (MAPK). Multiple p44/42 MAP3Ks have been identified, including members of the Raf family as well as Mos and Tpl2/Cot. MEK1 and MEK2 are the primary MAPKKs in this pathway (5,6). MEK1 and MEK2 activate p44 and p42 through phosphorylation of activation loop residues Thr202/Tyr204 and Thr185/Tyr187, respectively. Several downstream targets of p44/42 have been identified, including p90RSK (7) and the transcription factor Elk-1 (8,9). p44/42 are negatively regulated by a fam¬ily of dual-specificity (Thr/yr) MAPK phosphatases, known as DUSPs or MKPs (10), along with MEK inhibitors such as U0126 and PD98059. Specificity/Sensitivity:p44/42 MAP Kinase (197G2) Rabbit mAb detects endogenous levels of total p44/42 MAP kinase (Erk1/Erk2) protein. The antibody does not cross-react with JNK/SAPK or p38 MAP kinase. Source/Purification:Monoclonal antibody is produced by immunizing animals with a synthetic peptide correspond¬ing to residues near the C-terminus of rat p44 MAP kinase.
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage:	Store at –20°C. Avoid Freeze and Thaw cycles.

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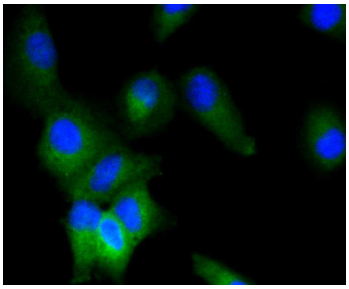
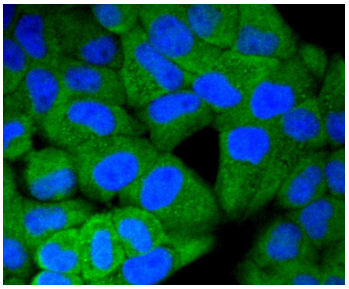
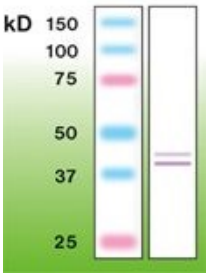


Immunofluorescence analysis of A549 cells using – MAPK1/MAPK3 antibody



Immunofluorescence analysis of HeLa cells using- MAPK1/MAPK3 antibody



Western blot of Erk 1,2 in rat brain crude lysate (100µg of protein loaded).

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