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Datasheet for 600-401-943

p44 Map Kinase Antibody

Overview

Description:	Anti-p44 MAP Kinase (ERK1) (RABBIT) Antibody - 600-401-943
Item No.:	600-401-943
Size:	100 µg
Applications:	ELISA, IP, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Cell proliferation is regulated in several contexts, for example during development, tissue differentiation, wound healing and immune responses. In mammalian cells, proliferative signals lead to the activation of a protein kinase cascade, resulting in the phosphorylation of two closely related Mitogen-Activated Protein Kinases (MAPK's) ERK1 and ERK2 of 44 kDa and 42 kDa, respectively. When activated, ERK's form dimers that translocate to the nucleus where they phosphorylate several classes of transcription factors which are involved in the up-regulation of immediate early genes. As such, ERK1 and ERK2 represent a paradigm for a growing family of proline-directed protein kinases that mediate entry, progression and exit from the cell cycle in diverse eukaryotic cells. These enzymes function within highly conserved cascade of sequentially activating protein kinases that transduce signals from diverse extracellular stimuli. Alternative splice transcript variants encoding different protein isoforms have been described. ERK1 and ERK2 are phosphorylated within the activation loop on both a Threonine and a Tyrosine residue (within a Thr-Glu-Tyr motif) by MEKs (MAPK/ERK kinases), thereby greatly elevating the activity of ERK1&2.
Synonyms:	ERK1 antibody, ERT 2 antibody, ERT2 antibody, Extracellular Signal Regulated Kinase 1 antibody, Extracellular signal related kinase 1 antibody, HGNC6877 antibody, HS44KDAP antibody, HUMKER1A antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MAPK3
Reactivity:	Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the carboxy terminal end of human p44 MAP Kinase (ERK1) protein.
Purity/Specificity:	This affinity-purified antibody is directed against the human p44 MAP Kinase (ERK1) protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with p44 MAP Kinase (ERK1) proteins from human, bovine, rabbit, rat and mouse. No reactivity is observed against p42 MAP Kinase (ERK2). Reactivity against homologues from other sources is not known.
Relevant Links:	• 600-401-943 SDS • UniProtKB - P27361 • NCBI - 91718899 • GeneID - 5595

Application Details

Tested Applications:	ELISA, IP, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, immunoprecipitation and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a predominant band approximately 44 kDa in size corresponding to p44 MAP Kinase (ERK1) by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 to 1:10,000
IP:	5.0 µg/mg sample
WB:	1:1,000-1:,2000

Formulation

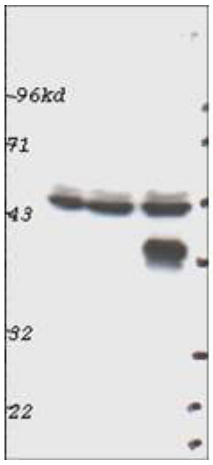
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.1 M Tris Chloride, 0.5 M Sodium Chloride, pH 8.0
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western blot using Rockland's Affinity Purified anti-p44 MAP Kinase (ERK1) antibody shows detection of ERK1 in whole cell lysates prepared from mouse brain (left), mouse kidney (center) and mouse intestine (right).

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