Datasheet for ABIN371668

anti-ERK1/2 antibody (Biotin)

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Overview

Quantity:	0.5 mg
Target:	ERK1/2 (MAPK1/3)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ERK1/2 antibody is conjugated to Biotin
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Immunogen:	Human recombinant Erk1 and Erk2.
Clone:	SB46b
Isotype:	IgG2a
Specificity:	This antibody precipitates ~42 kDa and ~44 kDa bands, corresponding to Erk1 and Erk2, respectively.
Characteristics:	Synonyms: MAPK1, ERK2, PRKM1, PRKM2, ERK-2, ERT1, ERT2, PRKM3, MAPK3, ERK-1, ERK1,Mitogen-activated protein kinase, Extracellular signal-regulated kinase, Insulin-stimulatedMAP2 kinase

Target Details

Target:	ERK1/2 (MAPK1/3)
Alternative Name:	ERK1 / ERK2 (MAPK1/3 Products)

Target Details

Background:	Erk1 and Erk2 are closely related mitogen activated protein (MAP) kinases which are activated by many growth factors, mitogens and differentiation-promoting agents via a protein kinase cascade. Also known as extracellular signal-regulated kinase 1 and 2, p44/p42 MAP kinases, microtubule-associated protein-2 kinases, myelin basic protein (MBP) kinases or EGF receptor T669 (Ert) kinases. (Ref.1-4) Erk1 and Erk2 are ubiquitous and abundant, although their relative abundance in specific tissues may vary. The two kinases are nearly 85 % identical and have higher identity in the core regions involved in substrate binding. (Ref.4) Erk1 and Erk2 are activated approximately 1000-fold by phosphorylation within a Thr-Glu-Tyr motif in the activation loop on both threonine and tyrosine residues by Mek1 and Mek2. (Ref.4,5) Both sites must be phosphorylated for maximum activity. (Ref.1-4) These kinases in turn phosphorylate a variety of different substrates. Erk1 and Erk2 are found in the cytoplasm and are translocated to the nucleus upon activation. Erk1 and Erk2 target membrane proteins, cytosolic proteins, such as downstream kinases, and cytoskeletal proteins and nuclear proteins, such as transcription factors. Many of these substrates are important regulatory proteins. Erk1 and Erk2 represent proximal kinases in the classical kinase pathway which links growth and differentiation signals at the cell surface (through tyrosine kinases) with transcription in the nucleus. (Ref.1-3)Synonyms: ERK-1/ERK-2, Extracellular signal-regulated kinase, Insulin-stimulated MAP2 kinase, MAPK1/MAPK2, Mitogen-activated protein kinase, P42/P44-MAPK

Application Details

Application Notes:	Western Blot. Predicted Mol. Weight: 42 and 44 kDa. Immunoprecipitation. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only

Handling

Concentration:	0.5 mg/mL
Buffer:	PBS containing 0.09 % Sodium Azide as preservative.
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for longer. Avoid

Handling

	repeated freezing and thawing. Shelf life: one year from despatch.
Expiry Date:	12 months