

**DATASHEET**

**ERK1/2 Rabbit Monoclonal Antibody(C3071)**

CAT. NO. AMA02683

**KEY FEATURES**

Target	ERK1/2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IF/ICC, IP	Conjugation	Unconjugated
Form / Buffer	Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.	Storage	at-20°C

**BACKGROUND**

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway . MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade also plays a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. About 160 substrates have already been discovered for ERKs.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:100
IP	1:10 - 1:50

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

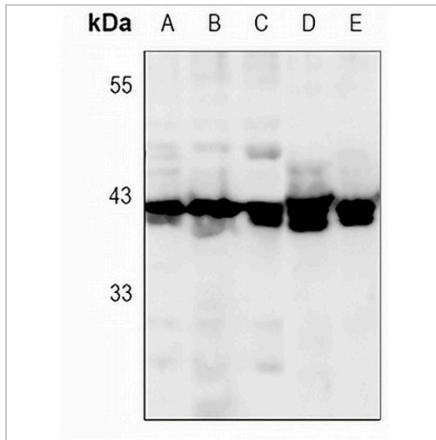
Description	Rabbit monoclonal antibody to ERK1/2
Specificity	Recognizes endogenous levels of ERK1/2 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant protein of human ERK2
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 44,42 kD; Observed: 44,42 kD
Form/Buffer	Liquid in 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA.
Alternative Names	MAPK3; ERK1; PRKM3; Mitogen-activated protein kinase 3; MAP kinase 3; MAPK 3; ERT2; Extracellular signal-regulated kinase 1; ERK-1; Insulin-stimulated MAP2 kinase; MAP kinase isoform p44; p44-MAPK; Microtubule-associated protein 2 kinase; p44-ERK1; 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
Gene Symbol	MAPK3; MAPK1
Entrez Gene	5595; 5594(Human); 26417; 26413(Mouse); 50689; 116590(Rat)
SwissProt	P27361; P28482(Human); Q63844; P63085(Mouse); P21708; P63086(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

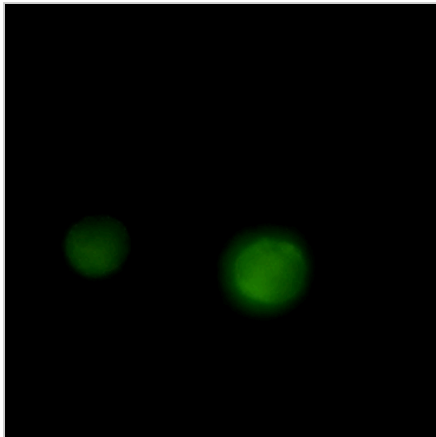
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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**DATA**

Western blot analysis of ERK1/2 expression in K562 (A), rat brain (B), C6 (C), NIH3T3 (D), HeLa (E) whole cell lysates. (Predicted band size: 44,42 kD; Observed band size: 44,42 kD)



Immunofluorescent analysis of ERK1/2 staining in K562 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.