

Datasheet: VMA00713

Description:	MOUSE ANTI ERK1 (pThr202/pTyr204)/ERK2 (pThr185/pTyr187)
Specificity:	ERK1 (pThr202/pTyr204)/ERK2 (pThr185/pTyr187)
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	F04/4G10
Isotype:	IgG1
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species	Human
Product Form	Purified IgG - Liquid
Preparation	Mouse monoclonal antibody affinity purified on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Synthetic peptide corresponding to the phosphorylated sites

**External Database
Links**

UniProt:

[P27361](#) [Related reagents](#)
[P28482](#) [Related reagents](#)

Entrez Gene:

[5595](#) MAPK3 [Related reagents](#)
[5594](#) MAPK1 [Related reagents](#)

Synonyms

ERK1, ERK2, PRKM1, PRKM2, PRKM3

Fusion Partners

Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line

Specificity

Mouse anti Human ERK1 (pThr202/pTyr204)/ERK2 (pThr185/pTyr187) antibody recognizes ERK1, also known as MAPK3, when phosphorylated at threonine 202 and tyrosine 204, and ERK2, also known as MAPK1, when phosphorylated at threonine 185 and tyrosine 187.

MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. ERK1/2 are proline-directed kinases that preferentially catalyze the phosphorylation of substrates containing a Pro-Xxx-Ser/Thr-Pro sequence (provided by RefSeq, Jul 2008). ERK1/2 are activated by phosphorylation by MAPK or ERK kinases (MEKs): ERK1 on threonine 202 and tyrosine 204 and ERK2 on threonine 185 and tyrosine 187 ([Butch and Guan 1996](#)).

Mouse anti Human ERK1 (pThr202/pTyr204)/ERK2 (pThr185/pTyr187) antibody detects bands of 42 and 44 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Mouse anti ERK1 (pThr202/pTyr204)/ERK2 (pThr185/pTyr187) detects bands of approximately 42 & 44 kDa in EGF-treated HEK293 cell lysates

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles

Guarantee

12 months from date of despatch

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/VMA00713>
Antibody (10040)

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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