

## Datasheet: VMA00485KT

<b>Description:</b>	ERK1/2 ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	ERK1/2
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	2 Westerns

### 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](http://www.bio-rad-antibodies.com/protocols).

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

**PrecisionAb antibodies have been extensively [validated for the western blot application](#).** The antibody has been validated at the suggested dilution. 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 dependant on sample type.

#### Target Species

Human

#### Species Cross Reactivity

Reacts with: Mouse

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

#### Product Form

Purified IgG - liquid

#### Preparation

20µl Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant

#### Buffer Solution

Phosphate buffered saline

#### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)

**Immunogen** Purified His-tagged ERK 1/2 protein

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**External Database**

**Links**

**UniProt:**

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

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

**Entrez Gene:**

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

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

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**Synonyms** ERK1, ERK2, PRKM1, PRKM2, PRKM3

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**Specificity** **Mouse anti Human ERK1/2 antibody** recognizes ERK1/2, also known as MAPK3/1.

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. Alternatively spliced transcript variants encoding different protein isoforms have been described (provided by RefSeq, Jul 2008).

Mouse anti Human ERK1/2 antibody detects bands of 42 and 44 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

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**Western Blotting** Anti ERK1/2 detects bands of approximately 42 and 44 kDa in NIH/3T3 cell lysate

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**Instructions For Use** Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

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**Lysate Composition** 400µg NIH/3T3 lysate lyophilized in RIPA buffer.

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**Lysate Reconstitution** - If using DDT reconstitute the lyophilized lysate with 190µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.  
- If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.  
Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

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**Storage** Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

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**Guarantee** As supplied, 12 months from date of despatch.

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**Acknowledgements** PrecisionAb  is a trademark of Bio-Rad Laboratories.

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**Health And Safety Information** Material Safety Datasheet documentation #10040 #10561 available at:  
Antibody (10040): <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>  
Lysate Material (10561): <https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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