

## Datasheet: VMA00482KT

<b>Description:</b>	ERK1 ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	ERK1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Isotype:</b>	IgG1
<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.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Mouse, Rat <b>N.B.</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.
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	20µl Mouse monoclonal antibody purified by affinity chromatography on Protein G from ascites
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Immunogen</b>	Purified recombinant fragment of human ERK1 expressed in <i>E. Coli</i>
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P27361</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">5595</a>    MAPK3    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	ERK1, PRKM3
<b>Specificity</b>	<p><b>Mouse anti Human ERK1 antibody</b> recognizes ERK1, also known as MAPK3, MAP kinase isoform p44, MAPK 1, extracellular signal-regulated kinase 1 or microtubule-associated protein 2 kinase.</p> <p>The protein encoded by MAPK3 gene is a member of the MAP kinase family. 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. Alternatively spliced transcript variants encoding different protein isoforms have been described (provided by RefSeq, Jul 2008).</p> <p>Mouse anti Human ERK1 antibody detects a band of 42 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p>
<b>Western Blotting</b>	Anti ERK1 detects a band of approximately 42 kDa in C6 cell lysate
<b>Instructions For Use</b>	Please refer to the <a href="#">PrecisionAb western blotting protocol</a> . For additional information on secondary antibody dilution and exposure time see product web page.
<b>Lysate Composition</b>	400µg C6 lysate lyophilized in RIPA buffer.
<b>Lysate Reconstitution</b>	<p>- 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.</p> <p>- If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.</p> <p>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.</p>
<b>Storage</b>	<p>Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.</p> <p>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.</p>
<b>Guarantee</b>	As supplied, 12 months from date of despatch.
<b>Acknowledgements</b>	PrecisionAb™ is a trademark of Bio-Rad Laboratories.

**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 IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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