

## Datasheet: VMA00134KT

<b>Description:</b>	EIF2S1 ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	EIF2S1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Clone:</b>	OTI3H4
<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.

### Target Species

Human

### Species Cross Reactivity

Reacts with: Mouse, Rat

**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 from ascites.

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)  
1% Bovine Serum Albumin

50% Glycerol

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**Immunogen** Full length recombinant human EIF2S1 (NP\_004085) produced in HEK293T cells

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**External Database Links**

**UniProt:**

[P05198](#)   [Related reagents](#)

**Entrez Gene:**

[1965](#)   EIF2S1   [Related reagents](#)

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**Synonyms** EIF2A

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**Specificity** **Mouse anti Human EIF2S1 antibody** recognizes EIF2S1, also known as eIF-2-alpha, eukaryotic translation initiation factor 2 subunit 1 and eukaryotic translation initiation factor 2 subunit alpha.

The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3 nonidentical subunits, the 36 kDa EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit (EIF2S2), and the 52-kD EIF2-gamma subunit (EIF2S3). The rate of formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha (Ernst *et al.* 1987).

Mouse anti Human EIF2S1 antibody detects a band of 36 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

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**Western Blotting** Anti EIF2S1 detects a band of approximately 36 kDa in HEK293 cell lysates.

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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 HEK293 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 #10048 #10561 available at:  
Antibody (10048): <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.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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