

## Datasheet: VPA00667KT

<b>Description:</b>	GLUTAMATE DEHYDROGENASE 1 ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	GLUTAMATE DEHYDROGENASE 1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Polyclonal
<b>Isotype:</b>	Polyclonal IgG
<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 Rabbit polyclonal antibody purified by affinity chromatography

#### Buffer Solution

Phosphate buffered saline

#### Preservative Stabilisers

0.09% Sodium Azide  
2% Sucrose

#### Immunogen

Synthetic peptide encompassing part of the N terminal region of human glutamate

dehydrogenase 1

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**External Database**

**Links**

**UniProt:**

[P00367](#)

[Related reagents](#)

**Entrez Gene:**

[2746](#)

GLUD1

[Related reagents](#)

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**Synonyms**

GLUD

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**Specificity**

**Rabbit anti Human glutamate dehydrogenase 1 antibody** recognizes glutamate dehydrogenase 1, mitochondrial, also known as GDH 1, glutamate dehydrogenase (NAD(P)+), glutamate dehydrogenase 1, mitochondrial.

The GLUD1 gene encodes glutamate dehydrogenase protein; a mitochondrial matrix enzyme that catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid induced insulin secretion and activating mutations in GLUD1 are a common cause of congenital hyperinsulinism. This enzyme is allosterically activated by ADP and inhibited by GTP and ATP. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from GLUD1 via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Multiple pseudogenes of GLUD1 are present in humans (provided by RefSeq, Sep 2009).

Rabbit anti Human glutamate dehydrogenase antibody detects a band of 52 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

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**Western Blotting**

Rabbit anti glutamate dehydrogenase 1 detects a band of approximately 52 kDa in HepG2 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 HepG2 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.

**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 #10045 #10561 available at:  
Antibody (10045): <https://www.bio-rad-antibodies.com/uploads/MSDS/10045.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 Rabbit IgG (H/L) (STAR208...) [HRP](#)

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Look out for updates on how to access your digital version at [bio-rad-antibodies.com](https://www.bio-rad-antibodies.com)

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