

Datasheet: VPA00026KT

| Description:  | DNA METHYLTRANSFERASE 1 ANTIBODY WITH CONTROL LYSATE |
|---------------|--|
| Specificity:  | DNA METHYLTRANSFERASE 1                              |
| Other names:  | DNMT1  |
| Format:       | Purified   |
| Product Type: | PrecisionAb Polyclonal                               |
| Isotype:      | Polyclonal IgG                                       |
| Quantity:     | 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                  | Yes | No | Not Determined | Suggested Dilution |
|------------------|-----|----|----------------|--------------------|
| Western Blotting |     |    |                | 1/1000             |

**PrecisionAb antibodies have been extensively** <u>validated for the western blot</u> <u>application.</u> 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   |
|-----------------------------|---|
| Product Form                | Purified IgG - liquid   |
| Preparation                 | 20μl Rabbit polyclonal antibody purified by affinity chromatography                   |
| Buffer Solution             | TRIS-citrate/Phosphate buffered saline  |
| Preservative<br>Stabilisers | 0.09% Sodium Azide (NaN <sub>3</sub> )  |
| Immunogen                   | Synthetic peptide corresponding to a region within human DNMT1 encoded within exon 25 |
| External Database<br>Links  | UniProt:  |

Related reagents

P26358

# **Entrez Gene:**

1786 DNMT1 Related reagents

| Synonyms              | AIM, CXXC9, DNMT  |
|-----------------------|---|
| Specificity           | Rabbit anti Human DNA methyltransferase 1 antibody recognizes human DNA (cytosine-5) methyltransferase 1, also known as DNMT1, CXXC-type zinc finger protein 9, MCMT or DNA methyltransferase Hsal. DNA methyltransferase 1 is a 1616 amino acid member of the C5-methyltransferase family, bearing 2 <a href="BAH">BAH</a> domains and single <a href="CXXC-type zinc finger">CXXC-type zinc finger</a> , <a href="DMAP">DMAP</a> -interaction and <a href="SAM-dependent MTase C5-type">SAM-dependent MTase C5-type</a> domains. The epitope recognized by Rabbit anti Human DNA methyltransferase 1 antibody maps to a region between residues 700 and 750 of human DNMT1. |
|                       | DNMT1 is a nuclear enzyme with a major role in the maintenance of DNA methylation patterns after replication ( <u>Song et al. 2012</u> ). DNA methylation is significant for epigenetic regulation of gene expression, X chromosome inactivation, genomic imprinting, and development ( <u>Lee et al. 2001</u> ). Overexpression of DNMT1 has been detected in several human cancers ( <u>Robertson et al. 1999</u> ).  |
|                       | Rabbit anti Human DNA methyltransferase 1 antibody recognizes human DNA methyltransferase 1 as a band of ~180 kDa in multiple human cell lysates by western blotting under reducing conditions.   |
| Western Blotting      | Anti DNA Methyltransferase 1 antibody detects a band of approximately 180 kDa in HEK293 cell lysates.   |
| Instructions For Use  | Please refer to the <u>PrecisionAb western blotting protocol</u> . For additional information on secondary antibody dilution and exposure time see product web page.  |
| Lysate Composition    | 400μg HEK293 lysate lyophilized in RIPA buffer.   |
| 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.  |
| 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.   |
| Acknowledgements      | PrecisionAb™ is a trademark of Bio-Rad Laboratories.  |

**Health And Safety** Information

Material Safety Datasheet documentation #10064 #10561 available at:

Antibody (10064): https://www.bio-rad-antibodies.com/uploads/MSDS/10064.pdf

Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf

Regulatory

For research purposes only

# Related Products

# **Recommended Secondary Antibodies**

Goat Anti Rabbit IgG (H/L) (STAR208...) HRP

Email: antibody\_sales\_us@bio-rad.com

North & South Tel: +1 800 265 7376 America

Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +44 (0)1865 852 739 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_uk@bio-rad.com

Email: antibody\_sales\_de@bio-rad.com

From March 15, 2021, we will no longer supply printed datasheets with our products. Look out for updates on how to access your digital version at bio-rad-antibodies.com 'M351043:190315'

#### Printed on 09 Feb 2021

© 2021 Bio-Rad Laboratories Inc | Legal | Imprint