

## Datasheet: VMA00117

|                      |                                |
|----------------------|--------------------------------|
| <b>Description:</b>  | MOUSE ANTI CYTOCHROME P450 3A4 |
| <b>Specificity:</b>  | CYTOCHROME P450 3A4            |
| <b>Format:</b>       | Purified                       |
| <b>Product Type:</b> | PrecisionAb™ Monoclonal        |
| <b>Isotype:</b>      | IgG1                           |
| <b>Quantity:</b>     | 100 µl                         |

## 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>Product Form</b>             | Purified IgG - liquid                                                                                                                                                                                                                                          |
| <b>Preparation</b>              | Mouse monoclonal antibody prepared 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 cytochrome P450 3A4 expressed in <i>E. coli</i>                                                                                                                                                                         |
| <b>External Database Links</b>  | <p><b>UniProt:</b><br/> <a href="#">P08684</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">1576</a>   CYP3A4   <a href="#">Related reagents</a></p>                                                                         |
| <b>Synonyms</b>                 | CYP3A3                                                                                                                                                                                                                                                         |
| <b>Specificity</b>              | <b>Mouse anti Human cytochrome P450 3A4 antibody</b> recognizes cytochrome P450 3A4, also known as 1,8-cineole 2-exo-monooxygenase, P450-III, steroid inducible, albendazole monooxygenase, albendazole sulfoxidase, cytochrome P450 3A3, cytochrome P450 HLp, |

cytochrome P450 NF-25, cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 3, cytochrome P450, subfamily IIIA (nifedipine oxidase), polypeptide 4, cytochrome P450-PCN1, glucocorticoid-inducible P450, nifedipine oxidase, quinine 3-monooxygenase and taurochenodeoxycholate 6- $\alpha$ -hydroxylase.

Encoded by the CYP3A4 gene, cytochrome P450 3A4 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by glucocorticoids and some pharmacological agents. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam and erythromycin. The enzyme also metabolizes some steroids and carcinogens. CYP3A4 is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different isoforms have been identified (provided by RefSeq, Feb 2011).

Mouse anti Human cytochrome P450 3A4 antibody detects a band of 50 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

|                                      |                                                                                                                                                                                                                  |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Western Blotting</b>              | Anti cytochrome P450 3A4 detects a band of approximately 50 kDa in human liver tissue cell lysates                                                                                                               |
| <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>Storage</b>                       | Store undiluted at -20°C, avoiding repeated freeze thaw cycles.                                                                                                                                                  |
| <b>Shelf Life</b>                    | As supplied, 12 months from date of despatch.                                                                                                                                                                    |
| <b>Acknowledgements</b>              | PrecisionAb™ is a trademark of Bio-Rad Laboratories.                                                                                                                                                             |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at: Antibody (10040): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a> |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                       |

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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

'M306905:170707'

Printed on 02 May 2018

