## Product Details

### Description:
MOUSE ANTI HUMAN PROTEIN GENE PRODUCT 9.5

### Specificity:
PROTEIN GENE PRODUCT 9.5

### Other names:
PGP 9.5, UCHL1

### Format:
Purified

### Product Type:
Monoclonal Antibody

### Clone:
31A3

### Isotype:
IgG1

### Quantity:
0.2 mg

### 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).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunohistology - Paraffin (1)</td>
<td>✔</td>
<td></td>
<td></td>
<td>1/100 - 1/400</td>
</tr>
<tr>
<td>ELISA</td>
<td></td>
<td>✔</td>
<td></td>
<td>1/500 - 1/2000</td>
</tr>
<tr>
<td>Western Blotting</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
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</table>

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](http://www.bio-rad-antibodies.com/protocols) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

(1) This antibody is suitable for use on paraffin embedded tissue sections. We do however recommend fixation in 95% ethanol/5% acetic acid for 2-3 hours prior to paraffin embedding. Specimens which have not been fixed in acetic acid/alcohol will require pretreatment using the microwave-citrate buffer method.

### Target Species

| Human |

### Species Cross Reactivity

Reacts with: Rat, Rabbit, Pig, Water Buffalo

Does not react with: Guinea Pig

**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.

<table>
<thead>
<tr>
<th>Product Form</th>
<th>Purified IgG - liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant</td>
</tr>
<tr>
<td>Buffer Solution</td>
<td>Phosphate buffered saline</td>
</tr>
<tr>
<td>Preservative Stabilisers</td>
<td>0.09% Sodium Azide (NaN$_3$)</td>
</tr>
<tr>
<td>Carrier Free</td>
<td>Yes</td>
</tr>
<tr>
<td>Approx. Protein Concentrations</td>
<td>1mg/ml</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Native, from brain</td>
</tr>
</tbody>
</table>

**External Database Links**

**UniProt:**

P09936 Related reagents

**Entrez Gene:**

7345  UCHL1 Related reagents

**RRID**

AB_620256

**Specificity**

Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 recognizes protein gene product 9.5 (PGP9.5), a ubiquitin hydrolase which is widely expressed in neuronal tissues and represents 1-2% of total soluble brain proteins. PGP9.5, also known as ubiquitin C-terminal hydrolase 1 (UCHL-1), is involved in the regulation of the ubiquitin pathway.

Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 stains neuronal cell bodies and axons in the CNS and periphery, small nerve fibres in peripheral tissues, neuroendocrine cells in the pituitary, thyroid, pancreas and tumours of the DNES.

Clones 31A3 and 13C4 each recognize a different epitope towards the N-terminus of the protein. Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 also recognizes PGP9.5 in other species, including rat and rabbit but evidence suggests it does not bind to PGP9.5 in guinea pigs (Wilson et al. 1988). Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 has been used successfully as a capture reagent with clone 13C4 as a detection reagent in a sandwich ELISA to evaluate contamination of processed meat samples with neuronal tissue (Gaunitz et al. 2009).

**References**


33. Yang, H. et al. (2021) Isolation, Cultivation and Identification of Spermatogonial Stem Cells from Juvenile Buffalo Testes Pakistan Journal of Zoology. 53 (3) [Epub ahead of print].
Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/7863-1004

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) HRP
Goat Anti Mouse IgG (STAR76...) RPE
Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (STAR70...) FITC
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...) FITC
Goat Anti Mouse IgG (STAR77...) HRP
Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M405300:220916'

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