

## Datasheet: AHP1355

<b>Description:</b>	RABBIT ANTI HUMAN MUSCARINIC RECEPTOR M3
<b>Specificity:</b>	MUSCARINIC RECEPTOR M3
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	50 µg

## 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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			10ug/ml
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays			▪	

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 appropriate negative/positive controls.

**(1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Based on sequence similarity, is expected to react with:Mouse <b>N.B.</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.
<b>Product Form</b>	Purified IgG - liquid

**Antiserum Preparation** Antisera to human muscarinic receptor M3 were raised by repeated immunisations of

rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.

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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
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<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
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<b>Immunogen</b>	Synthetic peptide corresponding to the 3rd cytoplasmic domain of human muscarinic receptor M3, conjugated to Keyhole Limpet Hemocyanin (KLH)
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P20309</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">1131</a> CHRM3 <a href="#">Related reagents</a>
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<b>RRID</b>	AB_906091
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<b>Specificity</b>	<p><b>Rabbit anti Human muscarinic receptor M3 antibody</b> detects the muscarinic receptor M3, a G protein-coupled receptor for acetylcholine which is expressed in smooth muscle and glandular tissues. The M3 subtype is coupled to other G proteins known as G<sub>o</sub> or G<sub>q</sub> which activate phospholipase C leading to an increase in intracellular Ca<sup>2+</sup>. The M3 muscarinic receptor controls smooth muscle contraction in blood vessels and lungs as well as in the gastrointestinal tract. It is also located in many glands, and its activation helps to stimulate secretion.</p> <p>Mutations in the CHRM gene can lead to the development of Prune Belly Syndrome (<a href="#">PBS</a>), a condition characterized by weak abdominal musculature, lax overlying skin, cryptorchism and urinary tract abnormalities (<a href="#">Weber et al. 2011</a>).</p>
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<b>Histology Positive Control Tissue</b>	Brain, cortex.
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<b>References</b>	1. Billington, C.K. & Penn, R.B. (2002) m3 muscarinic acetylcholine receptor regulation in the airway. <a href="#">Am J Respir Cell Mol Biol. 26 (3): 269-72.</a>
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<b>Further Reading</b>	1. Felton, J. <i>et al.</i> (2018) Targeting M3 Muscarinic Receptors for Colon Cancer Therapy. <a href="#">Curr Mol Pharmacol. Jan 18 [Epub ahead of print].</a> 2. Pronin, A.N. <i>et al.</i> (2017) Teaching an Old Drug New Tricks: Agonism, Antagonism, and Biased Signaling of Pilocarpine through M3 Muscarinic Acetylcholine Receptor. <a href="#">Mol Pharmacol. 92 (5): 601-612.</a>
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<b>Storage</b>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may
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denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)  
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)  
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)  
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)  
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

### Recommended Useful Reagents

- [HISTAR DETECTION SYSTEM \(STAR3000A\)](#)  
[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)  
[100x ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M363912:200529'

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