

Datasheet: AHP1355

Description:	RABBIT ANTI HUMAN MUSCARINIC RECEPTOR M3
Specificity:	MUSCARINIC RECEPTOR M3
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	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.

	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.

Target Species	Human
Species Cross Reactivity	Based on sequence similarity, is expected to react with: Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	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.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml

Immunogen Synthetic peptide corresponding to the 3rd cytoplasmic domain of human muscarinic receptor M3, conjugated to Keyhole Limpet Hemocyanin (KLH)

External Database Links

UniProt:
[P20309](#) [Related reagents](#)

Entrez Gene:
[1131](#) CHRM3 [Related reagents](#)

Specificity

Rabbit anti Human muscarinic receptor M3 antibody 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_o or G_q which activate phospholipase C leading to an increase in intracellular Ca²⁺. 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.

Mutations in the CHRM gene can lead to the development of Prune Belly Syndrome ([PBS](#)), a condition characterized by weak abdominal musculature, lax overlying skin, cryptorchism and urinary tract abnormalities ([Weber et al. 2011](#)).

Histology Positive Control Tissue

Brain, cortex.

References

1. Billington, C.K. & Penn, R.B. (2002) m3 muscarinic acetylcholine receptor regulation in the airway. [Am J Respir Cell Mol Biol. 26 \(3\): 269-72.](#)

Further Reading

1. Felton, J. *et al.* (2018) Targeting M3 Muscarinic Receptors for Colon Cancer Therapy. [Curr Mol Pharmacol. Jan 18 \[Epub ahead of print\].](#)
2. Pronin, A.N. *et al.* (2017) Teaching an Old Drug New Tricks: Agonism, Antagonism, and Biased Signaling of Pilocarpine through M3 Muscarinic Acetylcholine Receptor. [Mol Pharmacol. 92 \(5\): 601-612.](#)

Storage

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 denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight@488](#), [DyLight@549](#), [DyLight@649](#),
[DyLight@680](#), [DyLight@800](#)

Recommended Useful Reagents

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)

[HISTAR DETECTION SYSTEM \(STAR3000B\)](#)

[HISTAR DETECTION SYSTEM \(STAR3000C\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)

[ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: 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

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

'M318782:180719'

Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)