

Datasheet: 4050-0096

BATCH NUMBER 167199

Description:	MOUSE ANTI HUMAN ELASTASE
Specificity:	ELASTASE
Other names:	ELA2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	ELA10-101.5 (39A)
Isotype:	IgG1
Quantity:	0.2 mg

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			▪	
ELISA	▪			
Western Blotting			▪	
Immunofluorescence			▪	
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 the appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from ascites
Buffer Solution	Phosphate buffered saline
Preservative	<0.1% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations 0.5 mg/ml

Immunogen Elastase from human neutrophils.

External Database Links

UniProt:

[P08246](#)

[Related reagents](#)

Entrez Gene:

[1991](#)

ELANE

[Related reagents](#)

Synonyms ELA2

RRID AB_617258

Specificity

Mouse anti Human elastase antibody, clone 39A recognizes human neutrophil elastase, also known as elastase-2, Bone marrow serine protease, PMN elastase or Medullasin. Elastase is a 238 amino acid ~27 kDa enzyme with an additional 29 amino acid signal and pro-peptide region. Mutations of the ELA2 gene can lead to a number of hematopoietic disorders including cyclic hematopoiesis ([CH](#)) characterized by a 21 day cycle of bone marrow derived blood cell production with neutrophil numbers ranging between normal levels and almost zero ([Horwitz et al. 1999](#)) and severe congenital autosomal neutropenia ([SCN1](#)) demonstrating developmental arrest of granulopoiesis at the promyelocyte stage ([Bellanné-Chantelot et al. 2004](#)) with both conditions leading to a predisposition to bacterial infections..

References

1. Buján, J. *et al.* (2003) Expression of elastic components in healthy and varicose veins. [World J Surg. 27 \(8\): 901-5.](#)
2. Durant, S. *et al.* (2004) Apoptosis-induced proteinase 3 membrane expression is independent from degranulation. [J Leukoc Biol. 75 \(1\): 87-98.](#)
3. Korkmaz, B. *et al.* (2005) Inhibition of neutrophil elastase by alpha1-protease inhibitor at the surface of human polymorphonuclear neutrophils. [J Immunol. 175 \(5\): 3329-38.](#)
4. Vong, L. *et al.* (2007) Annexin 1 cleavage in activated neutrophils: a pivotal role for proteinase 3. [J Biol Chem. 282 \(41\): 29998-30004.](#)
5. Davies, P.L. *et al.* (2008) Monoclonal anti-neutrophil elastase antibody characterisation: ability to block function, detect free versus serpin-complexed enzyme and stain intracellular granules. [J Immunol Methods. 336 \(2\): 175-82.](#)
6. Muthana, M. *et al.* (2015) C5orf30 is a negative regulator of tissue damage in rheumatoid arthritis. [Proc Natl Acad Sci U S A. 112 \(37\): 11618-23.](#)

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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/4050-0096 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , 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 (Fc) (STAR120...)	FITC , 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	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
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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)

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