

Datasheet: 4297-5005

Description:	MOUSE ANTI HUMAN ERYTHROPOIETIN
Specificity:	ERYTHROPOIETIN
Other names:	EPO
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AE7A5
Isotype:	IgG2a
Quantity:	0.25 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
Western Blotting	■			

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
Species Cross Reactivity	Reacts with: Rat Does not react with: Baboon, Dog, Sheep N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	1.0 mg/ml
Immunogen	A 26 amino acid synthetic peptide corresponding to the N-terminal region of human erythropoietin with the sequence APPRLICDSRVLERYLLEAKEAENIT.
External Database Links	UniProt:

Entrez Gene:

[2056](#) EPO [Related reagents](#)

RRID AB_2098521

Specificity **Mouse anti Human Erythropoietin antibody, clone AE7A5** recognizes human erythropoietin (EPO) and binds to an epitope within the first 26 amino acids of the N-terminus of human urinary and human recombinant EPO.

EPO is a 166 amino acid ~30 kDa glycoprotein hormone secreted primarily by the kidney that stimulates bone marrow erythropoiesis in response to hypoxia or anemia. The cDNAs for Epo have been cloned from many species and the mature proteins from the various species are highly conserved, exhibiting greater than 80% sequence identity at the amino acid level.

Mouse anti Human Erythropoietin antibody, clone AE7A5 is the primary antibody sanctioned by the World Anti Doping Agency for the identification and evaluation of natural and recombinant erythropoietin by western blotting in biological samples ([WADA doc: TD2014EPO](#)). In addition to recognizing both recombinant and native human erythropoietin, clone AE7A5 cross reacts with zinc-alpha-2-glycoprotein, this reactivity is well separated from that of erythropoietin and does not interfere with the EPO testing assay ([Reichel 2008](#)).

References 1. Sytkowski, A.J. and Fisher, J.W. (1985) Isolation and characterization of an anti-peptide monoclonal antibody to human erythropoietin. [J Biol Chem. 260: 14727-31.](#)
2. Lasne, F. *et al.* (2009) Detection of continuous erythropoietin receptor activator in blood and urine in anti-doping control. [Haematologica. 94: 888-90.](#)
3. Lasne, F. (2006) No doubt about the validity of the urine test for detection of recombinant human erythropoietin. [Blood. 108 \(5\): 1778-9; author reply 1779-80.](#)

Further Reading 1. Sue, J.M. & Sytkowski, A.J. (1983) Site-specific antibodies to human erythropoietin directed toward the NH2-terminal region. [Proc Natl Acad Sci U S A. 80 \(12\): 3651-5.](#)

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.

Guarantee 12 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

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

North & South America	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

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