

Datasheet: TZA6435GA

Description:	MOUSE ANTI HUMAN TNF ALPHA
Specificity:	TNF ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	rM22-1E1
Isotype:	IgG1
Quantity:	0.1 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	▪			

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.

Target Species	Human
Product Form	Purified recombinant IgG containing a SpyTag at the C-terminus of the antibody heavy chain – 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	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> derived recombinant human TNF alpha

**External Database
Links**

UniProt:

[P01375](#) [Related reagents](#)

Entrez Gene:

[7124](#) TNF [Related reagents](#)

Synonyms

TNFA, TNFSF2

Specificity

Mouse anti Human TNF alpha antibody, clone rM22-1E1, is a recombinant monoclonal antibody that recognizes human tumor necrosis factor (TNF), also known as cachectin or tumor necrosis factor ligand superfamily member 2. TNF alpha is a cytokine that is mainly secreted by macrophages and plays a crucial role in regulating immune responses.

TNF alpha signals through two receptors, TNFR1 and TNFR2. Signalling through TNFR1, which is expressed constitutively on most cell types, tends to be pro-inflammatory and is involved in promoting apoptotic cell death. Signalling through TNFR2 is anti-inflammatory and promotes cell proliferation. TNF alpha is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia.

TNF alpha dysregulation has been linked to various human disorders and diseases. These include Rheumatoid Arthritis, where it impairs regulatory T-cells (Treg) function via FOXP3 dephosphorylation, and Alzheimer's disease, where chronic inflammation may influence the generation of plaques. Other diseases linked with TNF alpha dysregulation include Psoriasis, Inflammatory Bowel Disease (IBD), Ankylosing Spondylitis and Systemic Lupus Erythematosus (SLE).

Mouse anti Human TNF alpha, clone rM22-1E1, is derived from clone M22-1E1 ([MCA6435](#)), generated by cloning the variable DNA sequences into expression vectors for recombinant protein expression.

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl

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

This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See bio-rad.com/en-us/trademarks for details.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/TZA6435GA>

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
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 (STAR12...)	RPE

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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

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