



RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Biotinylated Mouse Anti-Tumor Necrosis Factor-alpha antibody

Catalog No:
RB-01-0006B

Species:
Human

Isotype:
Mouse IgG1

Genbank No:
NM_000595

Description

Tumor necrosis factor alpha (TNF α), also known as lymphotoxin and cachectin, is a pleiotropic cytokine. TNF α is a smaller cytokine with a molecular weight of 26 kDa (transmembrane) and 17 kDa (soluble) that binds to the same receptors producing a vast array of effects similar to those of TNF β . Both TNF α and TNF β share 30% amino acid homology and have similar biological activities. TNF α is produced primarily by monocytes, neutrophils and macrophages. It is found in synovial cells and macrophages in the tissues. TNF α and TNF β can modulate many immune and inflammatory functions, while having the ability to inhibit tumor growth. Target tumor cells must express TNF receptors 1 (55 kDa) and 2 (75 kDa) to be killed, with the p55 receptor mediating the cytotoxic response.

Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:1000-5000
Western Blotting	*			1:1000-2000
Immunohistology - frozen			#	
Immunohistology -paraffin			#	
Immunohistology - resin			#	
Immunoprecipitation			#	
Immunofluorence staining			#	
Neutralization			#	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Preparation

Immunogen was full recombinant protein derived from human TNF α . This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein G/A affinity chromatography. The purified antibody was labeled with biotin in vitro. The biotinylated antibody maintained binding activity for TNF α and Streptavidin.

Specificity

The biotinylated Human TNF α monoclonal antibody specifically detected the protein derived from human, Jurkat cell lysate at various concentrations. Cross reactivity with mouse and rat is not tested.

Reconstitution

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. *It final concentration is indicated in shipping vial.*

The antibody is stable for at least years from the data of receipt when stored at -20°C to -70°C. Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at -20°C to -70°C in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can be stored at 4°C for 1 month. **Please avoid freeze-thaw cycles.**

Storage

Store at -20°C, if not intended for use within a month, keep it at 4°C and minimize freezing and thawing when use.

Related products

1. Mouse Anti-Tumor necrosis factor-alpha(TNFSF2), Cat#[RB-01-0006](#)
2. Human Tumor Necrosis Factor alpha (TNF-alpha) ELISA Kit, Cat#ELH-TNFalpha-001
3. Mouse Tumor Necrosis Factor alpha (TNF-alpha) ELISA Kit, Cat# ELM-TNFalpha-001

Reference

Nedwin, G.E., et al. 1985. Human lymphotoxin and tumor necrosis factor genes: structure, homology and chromosomal localization. Nucl. Acids Res. 13: 6361-6373.

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