



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

#### Rat Anti-Mouse TNF alpha:Biotin

**Catalog No.**  
DS-MB-02429

**Target Species**  
Mouse

**Isotype**  
IgG2a

### Synonyms

TNFA, TNFSF2

### Preparation

**Purification:** Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

**Immunogen:** Recombinant murine TNF alpha expressed in E. coli

### Specificity

DS-MB-02429 is specific for mouse tumor necrosis factor alpha (TNF alpha), a 17 KDa cytokine produced by monocytes, macrophages, neutrophils, NK cells and CD4+ T cells. TNF alpha forms dimers and trimers, and is also found as a 26KDa integral membrane protein. Mouse TNF alpha has cytolytic activity against many tumor cell lines, and has an important immuno-regulatory role.

DS-MB-02429 is reported to neutralize the effects of mouse TNF alpha (4,5).

**Species Cross Reactivity:** Reacts with Rat

\* Antibody reactivity and working conditions may vary between species.

### Formulation

**Product Type:** Monoclonal Antibody

**Product Form:** purified IgG conjugated to Biotin – liquid

**Preservatives & Stabilizers:** 0.09% Sodium Azide, 1% Bovine Serum Albumin

**Buffer Solution:** Phosphate buffered saline pH7.4

**Approx. Protein Concentrations:** IgG concentration 0.5mg/ml

### Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. 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 dispatch.

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



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## Applications

**Table Summary of antibody applications and working conditions**

<b>Options Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
ELISA	•			1ug/ml - 10ug/ml
Immunohistology - Frozen			•	
Immunohistology - Paraffin			•	
Immunohistology - Resin			•	
Flow Cytometry (1)	•			1:10 – 1:50
Western Blotting			•	

**Note: Optimal dilutions should be determined by each laboratory for each application.**

**(1) Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells or 100ul whole blood.**

## References

1. Abrams, J. S. et al. (1992) Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples Immunol. Rev. 127: 5-24.
2. Hostager, B. et al. (2002) Role of TNF receptor-associated factor 2 in the activation of IgM secretion by CD40 and CD120b. J. Immunol. 168:3318-3322.
3. Ross, S. et al. (1997) Suppression of TNF-alpha expression, inhibition of Th1 activity, and amelioration of collagen-induced arthritis by rolipram. J. Immunol. 159:6253-6259.
4. Scanga, C. et al. (1999) Reactivation of latent tuberculosis : variations on the Cornell murine model. Infect. Immun. 67:4531-4538.
5. Yang, J. et al. (1995) Involvement of natural killer cells in nitric oxide production by spleen cells after stimulation with Mycobacterium bovis BCG. Study of the mechanism of the different abilities of viable and killed BCG. J. Immunol. 155:5728-5735.

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