



## 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](http://www.raybiotech.com)  
Email: [info@raybiotech.com](mailto:info@raybiotech.com)

### Certificate of Analysis and Data Sheet

## Rat Anti Human TNF-Alpha: Azide Free

With HRP-conjugated Secondary Antibody

**Catalog No.**  
DS-MB-02434

**Target Species**  
Human

**Isotype**  
IgG1

### Formulation

**Product Type:** Monoclonal Antibody

**Product Form:** Purified IgG - liquid

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

**Preservative & Stabilizers:** None present

**Approx. Protein Concentration:** IgG concentration 1.0 mg/ml

### Preparation

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

### Specificity

DS-MB-02434 recognizes human Tumor Necrosis Factor - alpha (TNF alpha), also known as TNFSF2. This 17kDa cytokine is expressed by activated macrophages, monocytes, neutrophils, T cells and NK cells.

### Storage

Store at -20°C only. 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.

**Shelf Life:** 18 months from date of dispatch.

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



## 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](http://www.raybiotech.com)  
Email: [info@raybiotech.com](mailto:info@raybiotech.com)

### Applications

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

<b>Options</b> <b>Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
ELISA	•			5ug/ml - 10ug/ml
Flow Cytometry (1)	•			
Immunohistology - frozen	•			
Western Blot		•		
Functional Assays	•			

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

### Secondary Antibody Applications

<b>Options</b> <b>Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000

#### (1) Flow Cytometry

Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul.

### References

1. Kadowaki N *et al.* (2000) Natural interferon alpha/beta-producing cells link innate and adaptive immunity. *J. Exp. Med.* 192: 219-225.
2. Butler D. *et al.* (1997) DBA/1 mice expressing the human TNF-alpha transgene develop a severe erosive arthritis. *J. Immunol.* 159: 2867-2876.
3. Abrams J. (1995) Immunoenzymatic assay of mouse and human cytokines using NIP-labelled anti-cytokine antibodies. Edited by Coligan J. *et al.* John Wiley and Sons.

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