



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Rat Anti-Human CD28

### With HRP-conjugated Secondary Antibody

**Catalog No.**  
DS-MB-03646

**Target Species**  
Human

**Isotype**  
IgG2b

### Preparation

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

**Immunogen:** Human peripheral blood T-cells

**Fusion Partners:** Spleen cells from an immunized DA rat were fused with cells of the Y3/Ag 1.2.3 rat myeloma cell line.

### Formulation

**Product Form:** Purified IgG - liquid

**Product Type:** Monoclonal Antibody

**Buffer Solution:** Phosphate buffered saline

**Preservative Stabilizers:** 0.09% Sodium Azide

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

### Specificity

DS-MB-03646 recognizes the human CD28 cell surface antigen, a 44kD glycoprotein expressed by a subset of T lymphocytes. The antibody enhances the MLR response.

It has been reported that this clone also recognizes an epitope of CD28 expressed by NK cells, which is not recognized by clones of 9.3 or CD28.2.(2)

### Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Flow Cytometry (1)	•			1/25 - 1/50
Immunohistology - Frozen	•			
Western Blotting			•	

**Note:** Other applications have not been tested. Optimal dilutions should be determined.

(1) Use 10ul of the suggested working dilution to label  $10^6$  cells or 100ul whole blood. Method sheets are available on request.

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



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### Secondary Antibody Applications

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

### 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.

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

### References

1. Reiter, C. (1989) Cluster Report: CD28 in Leucocyte Typing IV: White Cell Differentiation Antigens. Edited by Knapp, W., Dorken, B., Gilks, W.R., Rieber, E.P., Schmidt, R.E., Stein, H. and von dem Borne, A.E.G.Kr. Oxford University Press. pp 352-353.
2. Galea-Lauri, J. *et al.* (1999) Expression of a variant of CD28 on a subpopulation of human NK cells: Implications for B7-mediated stimulation of NK cells. *J. Immunol.* 163: 62-70.
3. Gabdoulkhakova, A. *et al.* (2007) High rate of mutation reporter gene inactivation during human T cell proliferation. *Immunogenetics.* 59: 135-43.
4. Pridgeon, C. *et al.* (2011) Regulation of IL-17 in chronic inflammation in the human lung. *Clin Sci (Lond).* 120: 515-24.

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