



## 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

## Mouse Anti-Human Dectin-1:Low Endotoxin

**Catalog No.**  
129-10237

**Target Species**  
Human

**Isotype**  
IgG1

### Preparation

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

**Immunogen:** NIH3T3 cells expressing full length Beta-glucan receptor.

**Fusion Partners:** Spleen cells from immunized C57BL/6 mice were fused with cells of the murine SP2 myeloma cell line.

### Specificity

129-10237 recognizes human Dectin-1, also known as beta-glucan receptor ( $\beta$ GR), a C-type lectin domain family member. It is a major pathogen pattern-recognition receptor that binds beta-glucans, glucose polymers that form cell-wall components or exopolymers of yeasts, fungi and some bacteria. Beta-glucans have also been used experimentally and therapeutically as immunomodulators that enhance resistance to bacterial, yeast, viral and protozoan infections, as well as tumor formation. Dectin-1 also acts as a co-stimulatory molecule on T-cells to induce their proliferation and is necessary for the TLR2-mediated inflammatory response. It is highly expressed on peripheral blood leukocytes and dendritic cells.

Human Dectin-1 has two major ( $\beta$ GR-A and  $\beta$ GR-B) and several minor isoforms.  $\beta$ GR-A and  $\beta$ GR-B differs by the presence and absence, respectively, of a stalk region. 129-10237 recognizes both of these isoforms. This antibody could be used to inhibit receptor function.

### Formulation

**Product Type:** Monoclonal Antibody

**Product Form:** Purified IgG - liquid

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

**Preservative Stabilizers:** None present

**Endotoxin Level:** <0.01EU/ug

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

### 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

<b>Options</b> <b>Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
Flow Cytometry (1)	•			Neat - 1/25
ELISA			•	
Western Blotting			•	
Functional Assays	•			

**Note: Other applications are not tested yet. Optimal dilutions should be determined.**  
**(1). Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul.**

### References

1. Willment, J. A. *et al.* (2005) The human beta-glucan receptor is widely expressed and functionally equivalent to murine Dectin-1 on primary cells. *Eur. J. Immunol.* 35: 1539-1547.

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