



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

## Monoclonal Antibody to Human Immunodeficiency Virus Type 1 (HIV-1), gp41

**Catalog No.**  
MD-05-0250

**Isotype**  
Mouse IgG1(*Ascites*)

**Species**  
Virus

### ***Description***

The attachment of enveloped viruses to cells and the fusion of viral and cellular membranes are critical early events in the HIV viral infection. This process is mediated by envelope glycoproteins (gp) on the surface of the virus. The human immunodeficiency virus type 1 (HIV-1) envelope glycoprotein, gp160, is proteolytically cleaved into gp120 and gp41, which remain noncovalently associated with one another. gp120 is one of the proteins that forms the envelope of HIV. gp120 projects from the surface of HIV and binds to the CD4 molecule on helper T cells. gp120 has been a logical experimental HIV vaccine because the outer envelope is the first part of the virus that encounters antibody. gp41 is embedded in the outer envelope of HIV that anchors gp120. gp41 also plays a key role in HIV's infection of CD4+ T cells by facilitating the fusion of the viral and cell membranes. The nomenclature of the gp proteins describes their respective molecular masses (e.g., gp160, gp120, gp41).

### ***Specificity***

Reactive with HIV-1 gp41 antigen in ELISA, Western blot with a suggested dilution of 1:1,000.

### ***Preparation***

Immunogen was HIV-1 gp41 recombinant antigen (a.a. 466-753 Strain IIIB).

### ***Formulation***

1 mg/ml in 1x PBS, pH 7.2 with 0.01% Sodium azide.

**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	•			
Western Blotting	•			1:1000
Immunohistology - frozen		•		
Immunohistology - paraffin		•		
Immunohistology - resin		•		
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorescence staining		•		
Neutralization			•	

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

## Storage

Short-term (up to 2 months) store at 2-8°C. Long term, aliquot and store at -20°C.

**Avoid multiple freeze/thaw cycles.**

**Centrifuge before opening to ensure complete recovery of vial contents.**

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