



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Rabbit anti-Activin A antibody

Catalog No:  
130-10022

Isotype:  
Rabbit Ig G

Species:  
Human

Accession No:  
P27092

### Description

Inhibins and Activins inhibit and activate, respectively, the secretion of follitropin by the pituitary gland. They are involved in regulating a number of diverse functions such as hypothalamic and pituitary hormone secretion, gonadal hormone secretion, germ cell development and maturation, erythroid differentiation, insulin secretion, nerve cell survival, embryonic axial development or bone growth, depending on their subunit composition. Inhibins appear to oppose the functions of activins. Induces somatostatin in the ciliary ganglion neurons and may play a role in regulating neurotransmitter phenotype.

### Applications

Summary of antibody applications and working conditions

| Options<br>Functions         | YES | NO | Not determined | Recommended<br>Work dilution or<br>concentration |
|------------------------------|-----|----|----------------|--|
| ELISA                        | *   |    |                | 1:8000(at least detecting 125ng/ml)              |
| Western Blotting             |     |    | *              |  |
| Enzyme<br>Immunoassay(EIA)   |     |    | *              |  |
| Immunohistology-<br>paraffin |     |    | *              |  |
| Immunohistology- resin       |     |    | *              |  |
| Immunoprecipitation          |     |    | *              |  |
| Flow Cytometry               |     |    | *              |  |
| Neutralization               |     |    | *              |  |

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

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



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### **Preparation**

Immunogen was synthetic peptide derived from human Activin A. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation, and followed by Protein A/G affinity chromatography.

### **Binding Activity**

The antibody can specifically bind to its immunogen, and did not show any cross reactivity with unrelated antigens in ELISA. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse and rat Activin A was not tested yet.

### **Reconstitution**

Supplied as lyophilized and purified antibody originally containing PBS, without **Preservative Stabilizers**, liking Sodium Azide. ***It final concentration is indicated in shipping vial.***

The antibody is stable for at least years from the data of receipt when stored at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Reconstituted antibody (suggesting with sterile PBS) can also be aliquotted and stored frozen at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  in a manual defrost freezer for months without detectable loss activity. Upon reconstitution, the antibody can also be stored over months at  $4^{\circ}\text{C}$ . **Please avoid freeze-thaw cycles.**

### **Storage**

Store at  $-20^{\circ}\text{C}$ . Keep it at  $4^{\circ}\text{C}$  if intended for use within a month, and **minimize freezing and thawing when use.**

### **Related products**

1. Custom Human Activin A ELISA Kit available on demand (Cat# ELH-ActivinA-001 )
2. Recombinant Human Activin-A (Cat#228-10022-1 )
3. RayBio® Human Cytokine Array 10 Service(Cat#AAH-SERV )

### **Reference**

McLean AB, et al. Activin a efficiently specifies definitive endoderm from human embryonic stem cells only when phosphatidylinositol 3-kinase signaling is suppressed. *Stem Cells*. 2007;25(1):29-38.

Semitekoulou M, et al. Activin-A induces regulatory T cells that suppress T helper cell immune responses and protect from allergic airway disease. *J Exp Med*. 2009 Aug 3;206(8):1769-85.

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