



## 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 ANGIOTENSIN II

With HRP-conjugated secondary antibody

**Catalog No.**  
DS-MB-00081

**Species:**  
Human

**Isotype:**  
Mouse IgG1

### Description

Angiotensin is formed from a precursor, angiotensinogen, which is produced by the liver and found in the  $\alpha$ -globulin fraction of plasma. The lowering of blood pressure is a stimulus to secretion of Renin by the kidney into the blood. Renin cleaves from angiotensinogen a terminal decapeptide, Angiotensin I (Ang I). This is further altered by the enzymatic removal of a dipeptide to form Angiotensin II (Ang II). Screening a panel of human-mouse somatic cell hybrids confirmed the assignment of the AGT locus to human chromosome 1. Ang II, an octapeptide hormone, is an important physiological effector of blood pressure and volume regulation through vasoconstriction, aldosterone release, sodium uptake and thirst stimulation. It has been shown that mechanical stress causes release of Ang II from cardiac myocytes and that Ang II acts as an initial mediator of the hypertrophic response. Ang II treatment also stimulates phosphorylation of Shc, FAK and MAP kinases and induces MKP-1, indicating stimulation of growth factor pathways. Ang II stimulation through AT1 has been shown to activate the JAK/Stat pathway involving a direct interaction between JAK2 and AT1 as demonstrated by co-immunoprecipitation.

### Preparation

This antibody was raised to a peptide representing Angiotensin II, conjugated to rabbit albumin. This antibody was produced from a hybridoma resulting from the fusion of a myeloma with B cells obtained from a mouse immunized with the immunogen. The IgG fraction of tissue culture supernatant was purified by Protein A chromatography.

### Specificity

Incomplete mapping indicates the site of reactivity to be Val-Tyr-Ile-His-Pro[AI/II(3-8)], a conserved region of all angiotensin molecules.

### Reconstitution

Supplied as 200  $\mu$ g of purified liquid antibody in PBS with pH 7.2, containing 0.1% Sodium Azide. Its final concentration is 1.0 mg/ml. **Please avoid freeze-thaw cycles.**

**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 Functions</b>	<b>YES</b>	<b>NO</b>	<b>Not determined</b>	<b>Recommended Work dilution or concentration</b>
ELISA (1)	•			In a simple indirect ELISA using 400ng of antigen coated per well, the 50% OD was observed at an antibody dilution of 1/5-1/500K. This titre was observed against Angiotensin I, Angiotensin II and Angiotensin III.
Western Blotting			•	
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.

### Secondary Antibody Applications

<b>Options 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

### 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.

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