



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Rabbit Anti-Human Troponin Antibody

<b>Catalog No:</b> 130-10087	<b>Isotype:</b> Rabbit IgG	<b>Species:</b> Human	<b>Accession No:</b> P45379
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### Description

Troponin is a complex of three regulatory proteins (troponin C, troponin I and troponin T) that is integral to muscle contraction in skeletal and cardiac muscle, but not smooth muscle. Troponin is a component of thin filaments (along with actin and tropomyosin), and is the protein to which calcium binds to accomplish this regulation. Troponin has three subunits, TnC, TnI, and TnT. When calcium is bound to specific sites on TnC, tropomyosin rolls out of the way of the actin filament active sites, so that myosin (a molecular motor organized in muscle thick filaments) can attach to the thin filament and produce force and/or movement.

### Applications

#### Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1 : 80,000
Western Blotting			*	
Enzyme Immunoassay(EIA)			*	
Immunohistology - 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 recombinant protein from human troponin. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum followed by Protein A/G affinity chromatography.

### **Specificity**

The antibody binds to human troponin. The specificity for binding to recombinant protein, cellular protein and native antigen is not defined. Cross reactivity with mouse or rat troponin was not tested.

### **Reconstitution**

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1x PBS to a final concentration of 1 mg/ml.

### **Storage**

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for at least 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

### **Related products**

1. Mouse Anti-Human Troponin C (cat# DS-MB-03430)
2. Goat Anti-Human Troponin I (Cardiac) (cat#DS-PB-02013)

### **Reference**

1. PDB 1J1E; et al. (2003). "Structure of the core domain of human cardiac troponin in the Ca (2+)-saturated form". *Nature* 424 (6944): 35–41.
2. Moses, Marsha A.; et al. (1999). "Troponin I is present in human cartilage and inhibits angiogenesis". *Proceedings of the National Academy of Sciences of the United States of America* 96 (6): 2645–2650.

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