



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Rabbit Anti-Human Parathyroid Hormone-related protein (PTHrP) Antibody

**Catalog No:**  
130-10011

**Isotype:**  
Rabbit IgG

**Species:**  
Human

**Accession No:**  
NP\_002811

### Description

The parathyroid hormone-related protein (PTHrP) is a member of the parathyroid hormone family. This hormone regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth. This hormone is involved in lactation possibly by regulating the mobilization and transfer of calcium to the milk. The receptor of this hormone, PTHR1, is responsible for most cases of humoral hypercalcemia of malignancy. Four alternatively spliced transcript variants encoding two distinct isoforms have been observed. Neuroendocrine peptide which is a critical regulator of cellular and organ growth, development, migration, differentiation and survival and of epithelial calcium ion transport. Regulates endochondral bone development and epithelial-mesenchymal interactions during the formation of the mammary glands and teeth.

### Applications

Table Summary of antibody applications and working conditions

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:20,000
Western Blot			*	
Enzyme Immunoassay (EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	

Note: Other applications have not been tested. 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 a synthetic peptide derived from human PTHrP. 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**

Rabbit Anti-Human Parathyroid Hormone-related Protein antibody detects specifically the target contained in tested samples (serum and tissue). Cross reactivity with mouse and rat PTH-RP 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 1 x 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 also be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 30 days at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

### **Related products**

RayBio® Parathyroid Hormone Related Peptide (PTH-RP) EIA Kit for Serum, Plasma, Culture Supernatant and Cell Lysates (cat# EIA-PTH-1)

### **Reference**

Peter Attia, M.D. et al., (2003) Parathyroid Hormone-Related Protein and Hypercalcemia in Patients With Metastatic Melanoma. *Am J Clin Oncol.* 26(1): 42–45.

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