

#### RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

# **Chicken Anti-Human Procalcitonin Antibody**

Catalog No.Isotype:Species:Accession No:130-00018Chicken IgGHumanP01258

## Description

Procalcitonin (PCT) is a peptide precursor of the hormone calcitonin. The mature calcitonin is composed of 116 amino acids and plays an important role in calcium homeostasis. Calcitonin is mainly produced by parafollicular C cells of the thyroid and the endocrine cells of the intestine and lung. Calcitonin causes a rapid but short-lived drop in the level of calcium and phosphate in blood by promoting the incorporation of those ions in the bones. Procalcitonin levels may be useful to distinguish bacterial infections from nonbacterial infections.

# **Applications**

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	*			1:5000-10,000
Western Blotting	*			
Enzyme Immunoassay (EIA)			*	
Immunohistology - paraffin			*	
Immunohistology - resin			*	
Immunoprecipitation			*	
Flow Cytometry			*	
Neutralization			*	

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



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### Preparation

Immunogen was recombinant protein derived from human procalcitonin. This antibody was produced from a chicken immunized with the immunogen. The IgG fraction was purified from chicken serum followed by Protein A/G affinity chromatography.

### **Binding Activity**

The antibody specifically binds to the 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 procalcitonin was not tested yet.

#### Reconstitution

The purified antibody is supplied lyophilized originally containing PBS without any preservative stabilizers. The final amount is indicated on the shipping vial.

The lyophilized antibody is stable for at least a year from the date of receipt when stored at  $-20^{\circ}$ C to  $-70^{\circ}$ C. It is suggested that the antibody is reconstituted with sterile PBS and can be aliquotted and stored frozen at  $-20^{\circ}$ C to  $-70^{\circ}$ C in a manual defrost freezer for months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for months at  $4^{\circ}$ C.

### Storage

The lyophilized antibody may be stored at  $4^{0}$ C if intended for use within a month. Please store at  $\leq -20^{0}$ C for longer term storage. **Minimize freeze-thaw cycles**.

#### Related products

- 1. Rabbit Anti-Human Procalcitonin (cat# 130-00025)
- 2. Recombinant Human Procalcitonin (cat# 228-11317-3)
- 3. Mouse Anti-Procalcitonin / Katacalcin (cat# MD-14-0114)



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#### Reference

Jereb M et al.. (2009) Usefulness of procalcitonin for diagnosis of infective endocarditis. Intern Emerg Med.4(3):221-6.

Prat C et al.. (2008) Evaluation of procalcitonin, neopterin, C-reactive protein, IL-6 and IL-8 as a diagnostic marker of infection in patients with febrile neutropenia. Leuk Lymphoma. 49(9):1752-61.