

## Anti-Procalcitonin (MOUSE) Monoclonal Antibody

Procalcitonin (18C4.B4.C2) Antibody Catalog # ASR4258

## **Specification**

## Anti-Procalcitonin (MOUSE) Monoclonal Antibody - Product Information

Host Mouse Balb/c Conjugate Unconjugated

Target Species
Reactivity
Human
Clonality
Application
WB, E, I, LCI

Application Note Anti-Procalcitonin [18C4.B4.C2] antibody

was tested by ELISA and Western Blot. Specific conditions for reactivity should be

optimized by the end user.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen Procalcitonin Antibody was produced in

mice prepared by repeated immunizations

with full-length recombinant human

Procalcitonin protein. 0.01% (w/v) Sodium Azide

## Anti-Procalcitonin (MOUSE) Monoclonal Antibody - Additional Information

### Gene ID 796

Preservative

## **Purity**

Anti-Procalcitonin Antibody was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for human Procalcitonin. Cross-reactivity with Procalcitonin from other sources has not been determined.

### **Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

#### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-Procalcitonin (MOUSE) Monoclonal Antibody - Protein Information

Name CALCA (HGNC:1437)

**Synonyms** CALC1



#### **Function**

CGRP1/CALCA is a peptide hormone that induces vasodilation mediated by the CALCRL-RAMP1 receptor complex (PubMed:<a href="http://www.uniprot.org/citations/1318039" target="\_blank">1318039</a>, PubMed:<a href="http://www.uniprot.org/citations/33602864" target="\_blank">33602864</a>, PubMed:<a href="http://www.uniprot.org/citations/9620797" target="\_blank">9620797</a>). Dilates a variety of vessels including the coronary, cerebral and systemic vasculature. Its abundance in the CNS also points toward a neurotransmitter or neuromodulator role (PubMed:<a href="http://www.uniprot.org/citations/3492492" target="\_blank">3492492</a>). It also elevates platelet cAMP (PubMed:<a href="http://www.uniprot.org/citations/1318039" target="\_blank">1318039</a>). CGRP1 can also bind and activate CALCR-RAMP1 (AMYR1) receptor complex (PubMed:<a href="http://www.uniprot.org/citations/38603770" target="\_blank">38603770</a>).

Cellular Location Secreted.

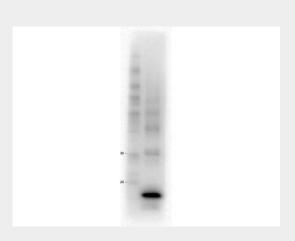
**Tissue Location** Expressed in spinal cord.

### Anti-Procalcitonin (MOUSE) Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Anti-Procalcitonin (MOUSE) Monoclonal Antibody - Images



Western Blot of Mouse Anti-Procalcitonin antibody. Lane 1: MW. Lane 2: Procalcitonin Protein. Load:  $5~\mu g$  per lane. Primary antibody: Procalcitonin antibody at NEAT overnight at 4°C. Secondary antibody: HRP Mouse IgG secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: 13.9 kDa.

# Anti-Procalcitonin (MOUSE) Monoclonal Antibody - Background

Anti-Procalcitonin antibody detects human Procalcitonin. Procalcitonin is a peptide hormone mainly





Tel: 858.875.1900 Fax: 858.875.1999

produced by the C cells of the thyroid and certain endocrine cells of the lung. Under normal expression conditions, procalcitonin is immediately cleaved into three specific fragments, a N terminal residue, calcitonin and katacalcin. Levels of unprocessed procalcitonin rise significantly after bacterial infection, trauma or shock. This gene encodes the peptide hormones calcitonin, calcitonin gene-related peptide and katacalcin by tissue-specific alternative RNA splicing of the gene transcripts and cleavage of inactive precursor proteins. Calcitonin is involved in calcium regulation and acts to regulate phosphorus metabolism. Calcitonin gene-related peptide functions as a vasodilator while katacalcin is a calcium-lowering peptide. Multiple transcript variants encoding different isoforms have been found for this gene.