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# CALCA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11119c

## Product Information

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|---|---|
| **Application** | IHC-P, WB, E |
| **Primary Accession** | P06881 |
| **Other Accession** | NP_001029125.1 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB19409 |
| **Calculated MW** | 13899 |
| **Antigen Region** | 56-83 |

## Additional Information

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| **Gene ID** | 796 |
| **Other Names** | Calcitonin gene-related peptide 1, Alpha-type CGRP, Calcitonin gene-related peptide I, CGRP-I, CALCA, CALC1 |
| **Target/Specificity** | This CALCA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 56-83 amino acids from the Central region of human CALCA. |
| **Dilution** | IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | CALCA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | CALCA ( HGNC:1437) |
| **Synonyms** | CALC1 |
| **Function** | CGRP1/CALCA is a peptide hormone that induces vasodilation mediated by |

the CALCRL-RAMP1 receptor complex (PubMed:1318039, PubMed:33602864, PubMed:9620797). 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:3492492). It also elevates platelet cAMP (PubMed:1318039). CGRP1 can also bind and activate CALCR-RAMP1 (AMYR1) receptor complex (PubMed:38603770).

**Cellular Location** Secreted.

**Tissue Location** Expressed in spinal cord.

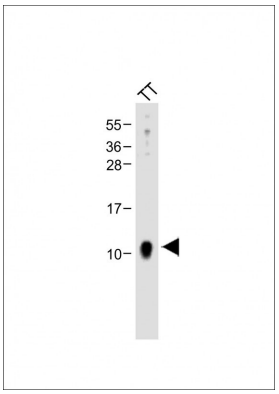
## Background

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.

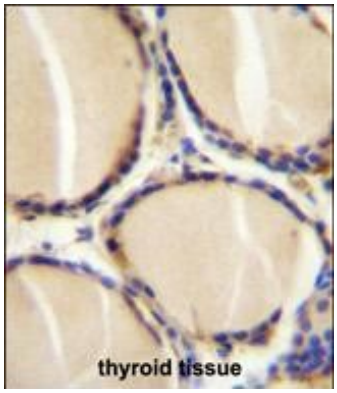
## References


Giroux, S., et al. Bone 47(5):975-981(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Lee, J.Y., et al. Korean J Lab Med 30(4):406-413(2010)
Giovanella, L., et al. Clin. Chem. Lab. Med. 48(8):1163-1165(2010)
Hatzistilianou, M. ScientificWorldJournal 10, 1941-1946 (2010) :


## Images




Anti-CALCA Antibody (Center) at 1:2000 dilution + TT whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




CALCA Antibody (Center) (Cat. #AP11119c)immunohistochemistry analysis in formalin fixed and paraffin embedded human thyroid tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of CALCA Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.


Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.