

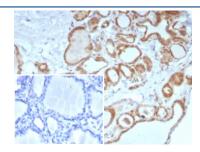
# Calcitonin Antibody / CALCA / CGRP [clone CALCA/8639R] (V4151)

Catalog No.	Formulation	Size
V4151-100UG	0.2~mg/ml in 1X PBS with $0.1~mg/ml$ BSA (US sourced), $0.05%$ sodium azide	100 ug
V4151-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4151SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

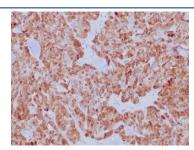
# Recombinant RABBIT MONOCLONAL

## **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	CALCA/8639R
Purity	Protein A/G affinity
UniProt	P01258
Localization	Cytoplasm, Secreted
Applications	Immunohistochemistry (FFPE): 1:10-1:20 for 30 minutes at RT
Limitations	This Calcitonin antibody is available for research use only.



IHC staining of FFPE human thyroid tissue with Calcitonin antibody (clone CALCA/8639R). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human medullary carcinoma tissue with Calcitonin antibody (clone CALCA/8639R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

### **Description**

Calcitonin is a 32 amino acid polypeptide hormone that preserves skeletal integrity and reduces blood calcium levels by decreasing osteoclast activity in bones, calcium and phosphate reabsorption by kidney tubules and calcium absorption by the intestines. The secretion of Calcitonin from the thyroid is regulated in part by estrogen, which increases Calcitonin mRNA levels. The Calcitonin gene, CALCA, undergoes tissue-specific RNA alternative splicing, resulting in the production of different mRNA transcripts. One transcript encodes procalcitonin as well as both calcium-lowering processed active polypeptides, Calcitonin and katacalcin. An alternative transcript of CALCA encodes the precursor for the neuropeptide referred to as Calcitonin generelated peptide 1, also designated CGRP1 or Alpha-CGRP. CGRP is a widely distributed vasodilatory peptide. Calcitonin and katacalcin are produced primarily in the thyroid, while CGRP is produced in neuronal cells. A second CGRP related gene, CALCB, thought to be derived from an gene duplication event, has been identified in mouse, rat and human. Unlike CALCA, CALCB is not subject to alternative splicing and encodes a single transcript designated CGRP2 or Beta-CGRP. Mature CGRP1 and CGRP2 share significant sequence identity at the protein level differing by only 1-3 amino acid residues, depending on the species.

# **Application Notes**

Optimal dilution of the Calcitonin antibody should be determined by the researcher.

### **Immunogen**

A recombinant fragment of human Calcitonin protein (around aa 1-141) was used as the immunogen for the Calcitonin antibody.

#### **Storage**

Aliquot the Calcitonin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.