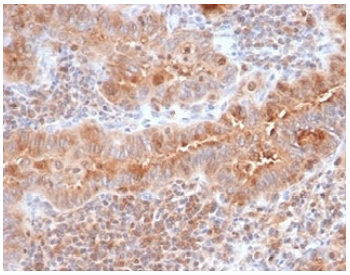
Calcitonin Antibody CALCA/3310 / CALCA Antibody [clone CALCA/3310] (V9637)

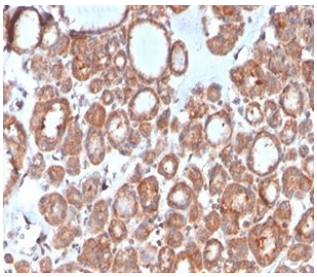
Catalog No.	Formulation	Size
V9637-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9637-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9637SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

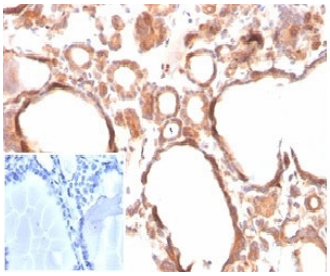
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	CALCA/3310
Purity	Protein A/G affinity
UniProt	P01258
RRID	AB_3756609
Localization	Cytoplasm, Secreted
Applications	Immunohistochemistry (FFPE): 2-4ug/ml
Limitations	This Calcitonin Antibody CALCA/3310 / CALCA Antibody is available for research use only.



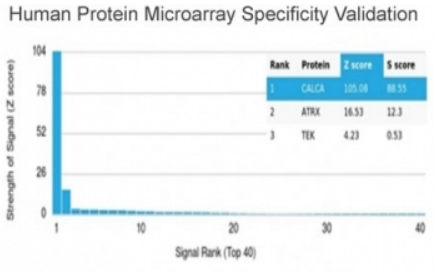
Calcitonin Antibody CALCA/3310 Staining of Human Thyroid IHC. Immunohistochemistry of FFPE human thyroid tissue using Calcitonin Antibody, clone CALCA/3310. Strong brown cytoplasmic immunoreactivity is visible in a discrete population of parafollicular cells, consistent with the expected cellular distribution of calcitonin in thyroid C cells and demonstrating detection by this CALCA Antibody under the tested conditions.



Calcitonin Antibody CALCA/3310 Staining of Human Thyroid IHC. Immunohistochemistry of a second FFPE human thyroid specimen using Calcitonin Antibody, clone CALCA/3310. Prominent brown cytoplasmic staining is observed in a localized population of cells within the thyroid tissue, providing an additional example of CALCA-associated immunoreactivity under the tested conditions.



Calcitonin Antibody CALCA/3310 Staining of Human Thyroid IHC. Immunohistochemistry of a third FFPE human thyroid specimen using Calcitonin Antibody, clone CALCA/3310. Distinct brown cytoplasmic immunoreactivity is visible within a subset of cells surrounded by largely unstained thyroid tissue, demonstrating localized detection by the Calcitonin Antibody under the tested conditions.



Calcitonin Antibody CALCA/3310 Protein Microarray Validated. Protein microarray analysis of Calcitonin Antibody, clone CALCA/3310, using a HuProt array containing more than 19,000 full-length human proteins. The intended CALCA target produced the dominant signal, with a Z-score of 24.36 and an S-score of 18.53. The Z-score measures target signal strength in standard deviations above the array mean, while the S-score measures separation between the intended target and the next-highest protein signal. The high S-score provides proteome-scale evidence supporting target selectivity of this Protein Microarray Validated antibody.

Description

Calcitonin Antibody CALCA/3310 / CALCA Antibody recognizes CALCA, the gene product that gives rise to calcitonin and other biologically active peptides through tissue-specific RNA processing and proteolytic maturation. CALCA is expressed prominently in thyroid parafollicular C cells, where its transcript produces the calcitonin precursor. Processing of this precursor generates calcitonin, a peptide hormone involved in calcium homeostasis and regulation of bone resorption.

Alternative processing of CALCA transcripts in neuronal tissues produces alpha-calcitonin gene-related peptide, commonly called alpha-CGRP or CGRP1. This neuropeptide has biological activities distinct from calcitonin and participates in sensory signaling, vasodilation, neurogenic inflammation, and neurovascular regulation. The ability of a single gene to produce distinct peptide products makes CALCA an important example of tissue-specific alternative RNA processing and precursor maturation.

Calcitonin is particularly associated with thyroid C-cell biology and is widely investigated as a marker of medullary thyroid carcinoma and other neuroendocrine contexts. CALCA-derived peptides are also studied in calcium regulation, bone biology, sensory neuroscience, vascular signaling, pain pathways, and neuroendocrine physiology. Because mature calcitonin and alpha-CGRP represent distinct products of the CALCA locus, antibodies directed against different regions of the precursor may provide different biological information depending on their epitope specificity.

Clone CALCA/3310 is a mouse monoclonal antibody generated against amino acids 3-116 of human CALCA. This Calcitonin Antibody is Protein Microarray Validated using a HuProt array containing more than 19,000 full-length human proteins, providing proteome-scale evidence supporting target selectivity. NSJ Bioreagents offers this CALCA Antibody for researchers investigating calcitonin expression, CALCA biology, neuroendocrine differentiation, and peptide hormone biology. A Calcitonin Antibody provides a clone-defined reagent for studying this biologically important CALCA-derived hormone system.

Explore our Cancer Marker Antibodies page for additional reagents targeting proteins used to investigate tumor identification, differentiation, classification, and disease-associated expression.

Application Notes

Optimal dilution of the Calcitonin Antibody CALCA/3310 / CALCA Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 3-116 was used as the immunogen for the Calcitonin Antibody CALCA/3310.

Storage

Aliquot the Calcitonin Antibody CALCA/3310 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CALCA antibody, Calcitonin antibody, Calcitonin-related polypeptide alpha antibody, CALC1 antibody, Procalcitonin antibody

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