



Product Information

ANTI-CALCITONIN

Developed in Rabbit, Whole Serum

Product Number **C2355**

Product Description

Anti-Calcitonin (CT) is developed in rabbit using a highly purified 32 amino acid peptide corresponding to human calcitonin.

Anti-Calcitonin specifically recognizes calcitonin and may be used for the detection of calcitonin in human and rat thyroid by immunofluorescence and immunohistochemistry on frozen sections. Reactivity against CGRP has not been tested, but is not expected based on the sequence homology between CT and CGRP.

The calcitonin gene peptide superfamily consists of calcitonin (CT), calcitonin gene related peptide (CGRP), amylin and adrenomedullin. CT and CGRP are derived from the CT/CGRP gene on chromosome 11.¹ Alternative splicing of the CT/CGRP transcript to produce either CT or CGRP is tissue specific. Calcitonin, a 32 amino acid peptide, is primarily involved in skeletal protection during calcium induced stress such as growth, pregnancy and lactation.² CT is derived from the C cells of the thyroid gland and is the most potent peptide inhibitor of osteoclast-mediated bone resorption.

Reagents

Anti-calcitonin is supplied as 100 µl of lyophilized rabbit antiserum.

Preparation Instructions

Reconstitute the lyophilized contents of the vial with 100 µl sterile deionized water. Be careful to reconstitute the entire contents of the vial.

Storage/Stability

Store the antibody at -20 °C. Upon reconstitution, freeze in working aliquots. Repeated freezing and thawing is not recommended. Dilute with sterile phosphate buffered saline or Tris buffer at dilutions no higher than 1:10. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution for frozen sections is 1:1000 to 1:2000 for PAP (Peroxidase Anti-Peroxidase) detection and 1:100 to 1:200 for immunofluorescent detection.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

1. Sexton, P.M. et al., *Curr. Med. Chem.*, **6**, 1067-1093 (1999).
2. Wimalawansa, S.J., *Crit. Rev. Neurobiol.*, **11**, 167-239 (1997).

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