

Product datasheet for TA355230

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Calca Mouse Monoclonal Antibody [Clone ID: CL1948]

Product data:

Isotype:

Product Type: Primary Antibodies

Clone Name: CL1948

IHC **Applications:**

Recommended Dilution: 1:200

Reactivity: Human

Host: Mouse IgG2b

Clonality: Monoclonal

Prokaryotic recombinant fusion protein containing 32 amino acids corresponding to the Immunogen:

mature human calcitonin molecule

Specificity: Human calcitonin

Formulation: Liquid tissue culture supernatant containing 15 mM sodium azide as a preservative

Conjugation: Unconjugated Store at 2-8°C Storage:

Stability: 12 months

Gene Name: calcitonin-related polypeptide alpha

Database Link: P01256



Background:

Calcitonin (CT) is a 32 amino acid peptide synthesized by the parafollicular C cells of the thyroid. It acts through its receptors to inhibit osteoclast mediated bone resorption, decrease calcium resorption by the kidney and decrease calcium absorption by the intestines. The action of calcitonin is therefore to cause a reduction in serum calcium, an effect opposite to that of parathyroid hormone. The calcitonin gene transcript also encodes the calcitonin generelated peptide (CGRP), which is thought to be a potent vasodilator. The tissue specificity of the transcript produced depends on alternative splicing of the CT/CGRP gene transcript. In the parafollicular cells of the thyroid 95% of the CT/CGRP is processed and translated to produce CT, however, in neuronal cells 99% of the CT/CGRP RNA is translated into CGRP. The C cells of the thyroid give rise to an endocrine tumor, medullary thyroid carcinoma (MTC), which occurs in a sporadic (75% of cases) and hereditary form (25% of cases). Familial MTC is associated with C cell hyperplasia (CCH), whereas sporadic MTC is thought not to be. However, in the general population CCH is present in 20-30% of thyroid glands, either with normal histology, thyroiditis or follicular tumors.

Synonyms:

CALC1; CGRP; CGRP-I; CGRP1; CT; katacalcin; KC; MGC126648; PCT; Procalcitonin