**Product name(s):**
Mouse monoclonal antibody to Calcitonin Gene-Related Peptide (CGRP) Clone CD8

**Catalogue number:** CA 1135
**Batch number:** Z05598
**Expiry date:** 12 months from receipt

**Introduction:**

Calcitonin gene-related peptide (CGRP) is a 37-amino acid disulphide-bridged sensory neuropeptide present in the central and peripheral nervous systems of many animal species. Two forms of CGRP (α and β) have been identified from both rat and human, and the sequence of chicken CGRP has also been reported, showing striking structural similarity to the mammalian forms. CGRP is abundant in perivascular sensory neurons and is known to be a potent vasodilator. More recent work supports the role of CGRP in mediating skin vasodilation and differential mesenteric artery vasorelaxation, as well as serving as an endogenous myocardial protective substance with a possible involvement in the inhibition of human platelet aggregation. CGRP is frequently co-localised with Substance P and immunoelectron microscopic observations have shown that the peptides are co-stored in single secretory granules both in sensory neurons and in thyroid C-cells. There are many hundreds of reports in the scientific literature describing the localisation and co-existence of CGRP with other transmitter molecules in a vast array of mammalian and non-mammalian species.

**Product information:**

The hybridoma was generated to synthetic C-terminal fragment of rat α-calcitonin gene-related peptide conjugated to bovine serum albumin using glutaraldehyde.

**Test tissues:** Human medullary carcinoma of thyroid, spinal cord and blood vessels; Guinea pig spinal cord and brain.

**Fixatives:**
Recommended fixative is 4% formaldehyde (prepared from para-polymer) in 0.1M sodium phosphate buffer (pH 7.2-7.4). Perfusion fixation is recommended if possible.

**Processing:**
Vibratome® slices, cryostat sections and de-paraffinised tissue sections have all been used successfully. A protease digestion of de-paraffinised tissue sections might be necessary to enhance immunostaining, in which case use 0.1% trypsin in PBS (at 37°C for 5-10min) or 0.4% pepsin in 0.01N HCl for 20-40min (at 37°C). Alternatively, high temperature antigen retrieval procedures may yield good results.

**Dilution range:** 1:200-1:1000, using overnight incubation (at 4°C) and PAP or ABC procedure. Up to 1:500 when using an overnight incubation at 4°C with an indirect immunofluorescence method.

**Note:**
CA1135 does not appear to stain motor cells in the ventral horn of the rat spinal cord, unlike the rabbit polyclonal antiserum to CGRP (CA1134).

**Vial contents, Storage and Use:**

See vial label for contents.

Dilute to working strength with phosphate-buffered saline (PBS) containing 0.1% w/v sodium azide.

Store unopened vial at -20°C until required for use. AVOID REPEATED FREEZE–THAW CYCLES. Aliquot undiluted antibody into smaller volumes prior to freezing if appropriate. Store diluted antibody at 2-4°C and use within 1 month.
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**References:**