

DESCRIPTION

Species Reactivity	Human
Specificity	Detects Human Procalcitonin in direct ELISA.
Source	Monoclonal Mouse IgG _{2A} Clone # 1057815
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human CGRP synthetic peptide (Tocris Catalog # 3012) Accession # P10092
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

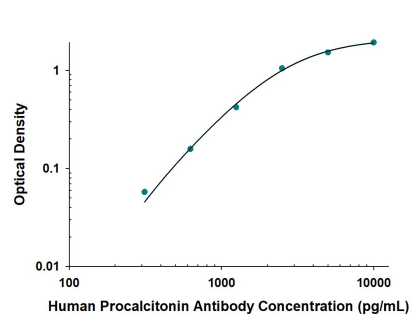
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	Immersion fixed TT human medullary thyroid cancer cell line (positive) and absent in THP-1 human acute monocytic leukemia cell line (negative)
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of human liver
ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human CGRP2 Monoclonal Antibody (Catalog # MAB11382). This product is intended for assay development on various assay platforms requiring antibody pairs.	

DATA

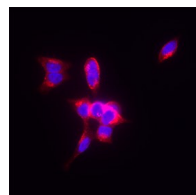
ELISA



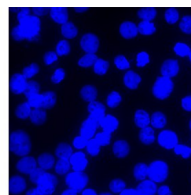
Human CGRP2 ELISA

Standard Curve. Recombinant Human CGRP2 protein was serially diluted 2-fold and captured by Mouse Anti-Human CGRP2 Monoclonal Antibody (Catalog # MAB11382) coated on a Clear Polystyrene Microplate (Catalog # DY990). Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB11323) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).

Immunocytochemistry



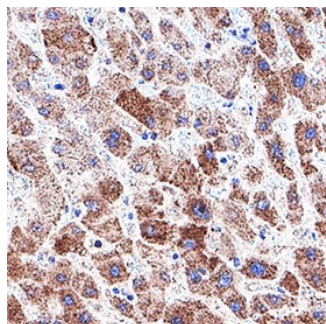
TT (Positive) cells



THP-1 (Negative) cells

Detection of Procalcitonin in TT cell line (positive) and absent in THP-1 cell line (negative). Procalcitonin was detected in immersion fixed TT human medullary thyroid cancer cell line (positive) and absent in THP-1 human acute monocytic leukemia cell line (negative) using Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB11323) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell surface. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Detection of Procalcitonin in Human Liver.

Procalcitonin was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB11323) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in hepatocytes. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Calcitonin gene-related peptide or CGRP is a 37-amino acid neuropeptide formed by alternative splicing of the calcitonin/CGRP gene. CGRP is a member of the calcitonin family of peptides consisting of calcitonin, amylin, adrenomedullin, adrenomedullin 2 (intermedin) and calcitonin-receptor-stimulating peptide. CGRP is produced in both peripheral and central neurons and induces vasodilation of a variety of vessels including the coronary, cerebral and systemic vasculature. Its abundance in the CNS also points toward a neurotransmitter or neuromodulator role.