

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Procalcitonin in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 944002
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human Procalcitonin synthetic peptide Ala26-Asp38 Accession # P01258
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.

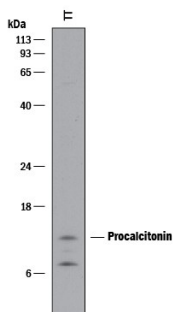
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below
ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB83502). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human Procalcitonin DuoSet ELISA Kit (Catalog # DY8350-05) for convenient development of a sandwich ELISA.</i>	

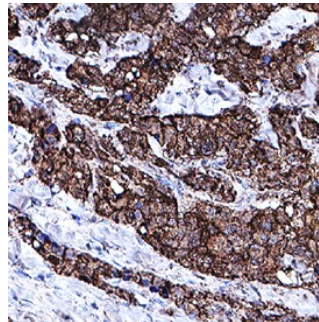
DATA

Western Blot



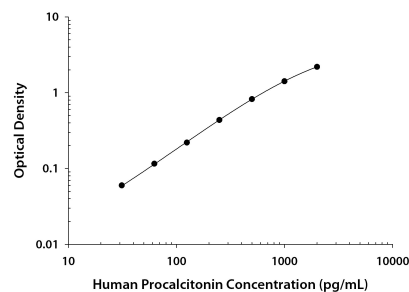
Detection of Human Procalcitonin by Western Blot. Western blot shows lysates of TT human medullary thyroid cancer cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB83501) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Procalcitonin at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Procalcitonin in Human Thyroid. Procalcitonin was detected in immersion fixed paraffin-embedded sections of human thyroid using Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB83501) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and cell surfaces. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

ELISA



Human Procalcitonin ELISA Standard Curve. Recombinant Human Procalcitonin protein was serially diluted 2-fold and captured by Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB83502) coated on a Clear Polystyrene Microplate (Catalog # DY990). Mouse Anti-Human Procalcitonin Monoclonal Antibody (Catalog # MAB83501) 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).

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. <ul style="list-style-type: none">● 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

Human Procalcitonin (CALCA and Calcitonin) is 141 amino acids (aa) in length member of the calcitonin family. Precursor protein is cleaved into a propeptide and the following 2 chains: Calcitonin (aa 85-116) and Katalcalcin (aa 121-141). Antigen used to develop this antibody is correspondent to the propeptide part of the precursor molecule. Secreted Calcitonin is known to cause a rapid but short-lived drop in the level of calcium and phosphate in blood by promoting the incorporation of those ions in the bones. Over aa 26-38, human Procalcitonin shares 64% aa identity with mouse Procalcitonin.