

Procalcitonin ELISA Kit | PCT elisa kit

Human Procalcitonin / PCT

CATALOG #
AAA59107

PRODUCT SYNONYMS

Procalcitonin; Human Procalcitonin / PCT; PCT Human ELISA Kit; PCT elisa kit

PRODUCT SPECIFICATIONS

Samples	Human serum, plasma, tissue homogenates or cell culture supernatants.
Assay Type	Sandwich
Detection Range	31.2 pg/ml-2000 pg/ml
Sensitivity	< 2 pg/ml
Preparation and Storage	Store at 2-8 degree C for 4 months, or at -20 degree C for 8 months.

IMAGES

Typical Data & Standard Curve
Results of a typical standard run of a Human PCT ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A-not applicable)

X	pg/ml	0	31.2	62.5	125	250	500	1000	2000
Y	OD450	0.046	0.082	0.126	0.217	0.410	0.815	1.487	2.348

Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for PCT elisa kit

Principle of the Assay||This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-PCT monoclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-PCT monoclonal antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the PCT amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of PCT can be calculated.

Background/Introduction: Procalcitonin (PCT) is a peptide precursor of the hormone calcitonin, the latter being involved with calcium homeostasis. It is composed of 116 amino acids and is produced by parafollicular cells (C cells) of the thyroid and by the neuroendocrine cells of the lung and the intestine. Measurement of procalcitonin can be used as a marker of severe sepsis caused by bacteria and generally grades well with the degree of sepsis, although levels of procalcitonin in the blood are very low. PCT has the greatest sensitivity (85%) and specificity (91%) for differentiating patients with systemic inflammatory response syndrome (SIRS) from those with sepsis, when compared with IL-2, IL-6, IL-8, CRP and TNF-alpha. It is a biomarker of bacterial infection which may help gauge the severity and prognosis of patients with CAP. In addition to clinical predictors, PCT may assist in decisions pertaining to timing of discharge from hospital and the discontinuation of antibiotics.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/pct-elisa-kits/procalcitonin/59107>