

Pig Procalcitonin ELISA Kit | PCT elisa kit

Pig Procalcitonin (PCT) ELISA Kit

CATALOG #
AAA55799

REACTIVITY
Pig

PRODUCT SYNONYMS

Procalcitonin; Pig Procalcitonin (PCT) ELISA Kit; PCT elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Pig
Specificity	This assay has high sensitivity and excellent specificity for detection of Pig PCT. No significant cross-reactivity or interference between Pig PCT and analogues was observed.
Assay Type	Quantitative Sandwich
Samples	Serum, plasma and other biological fluids
Detection Range	31.25 pg/mL - 2000 pg/mL
Sensitivity	10.4 pg/mL (mean of 6 independent assays)
Intra-assay Precision	Intra-assay Precision (Precision within an assay) Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision. Intra-Assay: CV<8%
Inter-assay Precision	Inter-assay Precision (Precision between assays) Three samples of known concentration were tested in forty separate assays to assess inter-assay precision. CV (%) = SD/meanX100. Inter-Assay: CV<12%
Preparation and Storage	Store at 2-8 degree C.

ADDITIONAL INFORMATION

Related Product Information for PCT elisa kit

Background: Procalcitonin (PCT) is a 116 amino acid residue peptide with molecular weight of about 13 kDa. PCT itself has no known hormonal activity. PCT belongs to a group of related proteins including calcitonin gene-related peptides I and II, amylin, adrenomodulin and calcitonin (CAPA peptide family). PCT, like other peptides of CAPA family, appears from the common precursor pre-procalcitonin consisting of 141 amino acids by removal of 25 amino acids from the N-terminus. PCT undergoes successive cleavages to form three molecules: N-terminal fragment (55 a.a.), calcitonin (32 a.a.) and katacalcin (21 a.a.). Under normal metabolic conditions, PCT is only present in the C cells of the thyroid gland. In bacterial infection and sepsis, however, intact PCT is found in the blood and, more importantly, its level is related to the severity of bacterial sepsis. Today, PCT is considered to be one of the earliest and most specific markers of sepsis.

Principle of the Assay: This assay employs a two-site sandwich ELISA to quantitate PCT in Pig serum, plasma. An antibody specific for PCT has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any PCT present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PCT is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PCT bound in the initial step. The color development is stopped and the intensity of the color is measured.

Intended Uses: For the quantitative detection of Pig Procalcitonin (PCT) concentration in serum, plasma and other biological fluids.

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.

