

# Product specification ANTIBODY

2023-02-03

## Anti-h PCT 4008 SPTN-5

### **Product overview**

Catalog number 100769

**Specificity** Antibody recognizes human procalcitonin (PCT)

**Description** Monoclonal mouse antibody, cultured *in vitro* under conditions free from

animal-derived components.

Product buffer solution 50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN<sub>3</sub> as a preservative

Shelf life and storage Unspecified, storage at 2–8 °C

 $\hbox{Subclass} \hspace{2cm} \hbox{Ig} G_3$ 

**Analyte description** Procalcitonin (PCT) is a precursor protein of the hormone calcitonin,

produced by the thyroid gland. It is a 116 amino acid protein that is cleaved intracellularly to form three peptides: N-terminal procalcitonin, calcitonin, and katacalcin. In healthy individuals, only the calcitonin polypeptide is secreted into the bloodstream, and PCT serum levels are very low. However, in patients with systemic infections, and especially

sepsis, serum PCT levels rise rapidly.

#### Parameters tested on each lot

Product appearance Liquid, may turn slightly opaque during storage

Product concentration 5.0 mg/ml (+/- 10%)

**Immunoreactivity** 80–120% compared to the reference sample in an FIA test

IEF Profile 8.2–9.1

**Purity**  $\geq 95 \%$ 

### Kinetic parameters

Association rate constant Not Determined (N/D)

Dissociation rate constant N/D

Affinity constant N/D

Determination method -

Determination antigen -





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**Cross-reactivities** 

N/D

**Epitope** 

Anti-h PCT 4008 antibody recognizes the katacalcin domain of procalcitonin, i.e. the region Asp(96) - Asn(116), as calculated from the peptide sequence of the mature PCT protein, without the signal sequence. The binding epitope is located in the region Asp(96)-Ser(110).

#### Pair recommendations

		DETECTION					
		4003	4004	4005	4006	4008	4051
CAPTURE	4003	-	+	+	-	-	+
	4004	+	ı	-	+	+	-
	4005	+	-	-	+	+	-
	4006	-	+	+	-	-	+
	4008	i	+	+	-	ı	+
	4051	+	-	-	+	+	-

Following pairs are especially recommended for the below mentioned assays:

LF: 4006 (membrane) - 4004 (particles) and 4006 (membrane) - 4051 (particles)

Please note that pair recommendations are based on results obtained by our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations are only indicative.

**Platforms tested** 

FIA, LF, CLIA

**Antigens tested** 

Recombinant PCT antigen, Medix Biochemica 610080.

**Product stability** 

TEMPERATURE, TIME	RESULT
-70 °C, 21 days	OK
-20 °C, 21 days	OK
+4 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 7 days	OK

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. Please note that the shelf life given on the first page is based on real time stability testing at 2-8 °C in the product buffer.

**Miscellaneous** 

References



Legal disclaimer