

## PRODUCT SPECIFICATIONS

Date: 2016-09-20

<b>PRODUCT NAME</b>	:	Anti-h PCT 4005 SPTN-5
<b>PRODUCT SPECIFICITY</b>	:	Antibody recognizes human Procalcitonin (PCT)
<b>PRODUCT CODE</b>	:	100564
<b>PRODUCT BUFFER</b>	:	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>SHELF LIFE AND STORAGE</b>	:	Shelf life unspecified, storage at 2-8 °C
<b>ANALYTE DESCRIPTION</b>	:	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 FROM EACH LOT

<b>PRODUCT APPEARANCE</b>	:	Clear liquid, may precipitate during storage which does not alter the product specifications. Precipitate can be removed by centrifugation or filtering.
<b>PRODUCT CONCENTRATION</b>	:	5.0 mg/ml (+/- 10 %)
<b>PRODUCT ACTIVITY</b>	:	80 – 120 % compared to reference in an IFMA-test
<b>IEF-RANGE</b>	:	5.7 – 6.2
<b>PURITY</b>	:	≥ 95 %

### PARAMETERS DETERMINED ONLY DURING PRODUCT R&D PHASE

<b>CLASS AND SUBCLASS</b>	:	IgG <sub>1</sub>
<b>ASSOCIATION CONSTANT</b>	:	Not determined (N/D)
<b>DISSOCIATION CONSTANT</b>	:	N/D
<b>AFFINITY CONSTANT</b>	:	N/D
<b>DETERMINATION METHOD</b>	:	-
<b>ANTIGEN</b>	:	-
<b>CROSS-REACTIVITIES</b>	:	None tested

**EPITOPE** : Anti-h PCT 4005 antibody recognizes the calcitonin domain of procalcitonin, i.e. the region Met(67) - Arg (95), as calculated from the peptide sequence of the mature PCT protein, without the signal sequence. The most critical amino acids for binding are Phe-His-Thr-Phe (78-81).

**EPITOPE GROUP** : -

**PAIR RECOMMENDATIONS**

SOLID	LABEL
4005	4006, 4003, 4001
4006, 4003	4005

Please note that pair recommendations are based on results obtained in our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations should be taken only as a directive.

**PRODUCT STABILITY**

TEMPERATURE, DAYS	RESULT
-70 °C, 21 days	OK
-20 °C, 21 days	OK
+4 °C, 21 days	OK
+35 °C, 7 days	OK
+35 °C, 21 days	OK
+45 °C, 3 days	OK
+45 °C, 7 days	Failed due to reduced antigen binding.

Please note that the shelf life given on page one is based on real time stability testing at +2-8 °C in the product buffer.

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. The maximum duration of the test is 21 days, except for the +45 °C only 7 days.

**MISCELLANEOUS** : -

**REFERENCES** : -

**Legal disclaimer**

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