

## PRODUCT SPECIFICATIONS

Date: 2015-02-25

<b>PRODUCT NAME</b>	:	Anti-h PSA 8313 SPTN-5
<b>PRODUCT SPECIFICITY</b>	:	Antibody recognizes human free Prostate-Specific Antigen
<b>PRODUCT CODE</b>	:	100488
<b>PRODUCT BUFFER</b>	:	50 mM Na-citrate, pH 6.5, 0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>SHELF LIFE AND STORAGE</b>	:	Unspecified, storage at 2-8 °C
<b>ANALYTE DESCRIPTION</b>	:	Prostate-specific antigen (PSA) is a protein produced by the cells of the prostate gland. PSA is present in small quantities in the serum of healthy men, and is often elevated in the presence of prostate cancer and in other prostate disorders. A blood test to measure PSA is considered the most effective test currently available for the early detection of prostate cancer, but this effectiveness has also been questioned.

## 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>	:	5.1 - 6.4
<b>PURITY</b>	:	≥ 95 %

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

<b>CLASS AND SUBCLASS</b>	:	IgG <sub>1</sub>
<b>ASSOCIATION CONSTANT</b>	:	$2.0 \times 10^6$ 1/Ms
<b>DISSOCIATION CONSTANT</b>	:	$1.5 \times 10^{-5}$ 1/s
<b>AFFINITY CONSTANT</b>	:	KA = $1.3 \times 10^{11}$ 1/M; KD = $7.5 \times 10^{-12}$ M (=0.0075 nM)
<b>DETERMINATION METHOD</b>	:	SPR analysis (BioRad ProteOn XPR36)
<b>ANTIGEN</b>	:	PSA human (Scripps, Cat PO725, Lot 2470302)
<b>CROSS-REACTIVITIES</b>	:	No cross-reactivity with PSA-ACT complex, nor hK2. Others not tested.

**EPITOPE** : amino acids 82-89

**EPITOPE GROUP** : -

Two antibodies binding to the same, or closely located epitopes, belong to the same group and hence cannot be used as a pair in a sandwich assay. Epitope group numbering does not give any detailed information where the epitope is located.

**PAIR RECOMMENDATIONS** : **SOLID** **LABEL**

8301, 8311, 8312 8313

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**

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.

-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. 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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