

Product specifications

Name	Anti-h PSA 8313 SPTN-5
Specificity	Antibody recognizes human prostate-specific antigen
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
Product code	100488
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	18 months from manufacturing at 2–8 °C
Subclass	IgG ₁
Analyte description	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 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	5.7–6.9
Purity	≥ 95 %

Kinetic parameters

Association rate constant	2.0×10^6 1/Ms
Dissociation rate constant	1.5×10^{-5} 1/s
Affinity constant	$K_A = 1.3 \times 10^{11}$ 1/M; $K_D = 7.5 \times 10^{-12}$ M (=0.0075 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	PSA human, Scripps (Cat P0725, Lot 2470302)

Cross-reactivities Does not recognize PSA-ACT complex or human-kallikrein-2. Others not tested.

Epitope Amino acids 82–89 (LKNRFLRP)

Pair recommendations

		DETECTION			
		8301	8311	8312	8313 (free PSA)
CAPTURE	8301	-	+	+	+
	8311	+	-	-	+
	8312	+	-	-	+
	8313 (free PSA)	+	+	+	-

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

Antigens tested Native PSA antigen, Lee Biosolutions 497-11 and 497-17.

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 -

