

## PRODUCT SPECIFICATIONS

<b>Name</b>	Anti-h CRP 6402 SPTN-5
<b>Specificity</b>	Antibody recognizes human C-reactive protein (CRP), binding is Ca <sup>2+</sup> independent
<b>Description</b>	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
<b>Product code</b>	100145
<b>Product buffer solution</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>	24 months from manufacturing at 2-8 °C
<b>Analyte description</b>	CRP is a member of the class of acute-phase reactants, as its levels rise dramatically during inflammatory processes occurring in the body. CRP rises up to 50,000-fold in acute inflammation, such as infection. It rises above normal limits within 6 hours, and peaks at 48 hours. Its half-life is constant, and therefore its level is mainly determined by the rate of production (and hence the severity of the precipitating cause). CRP is used mainly as a marker of inflammation. Measuring and charting CRP values can prove useful in determining disease progress or the effectiveness of treatments.

## PARAMETERS TESTED ON EACH LOT

<b>Product appearance</b>	Liquid, may turn slightly opaque during storage
<b>Product concentration</b>	5.0 mg/ml (+/- 10 %)
<b>Immunoreactivity</b>	80-120 % compared to the reference sample in an FIA test
<b>IEF Profile</b>	6.7 - 7.6
<b>Purity</b>	≥ 95 %

## PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

<b>Subclass</b>	IgG <sub>1</sub>
<b>Association rate constant</b>	7.3 × 10 <sup>5</sup> 1/Ms
<b>Dissociation rate constant</b>	1.2 × 10 <sup>-4</sup> 1/s
<b>Affinity constant</b>	K <sub>A</sub> = 6.2 × 10 <sup>9</sup> 1/M; K <sub>D</sub> = 1.6 × 10 <sup>-10</sup> M (= 0.16 nM)
<b>Determination method</b>	SPR analysis (ProteOn XPR36)
<b>Determination antigen</b>	Human CRP, Scripps (Cat C0124, Lot 2200701)

**Cross-reactivities** No cross-reactivity against serum Amyloid-P complex, others not tested

**Epitope** Not Determined (N/D)

<b>Pair recommendations</b>	<b>CAPTURE ANTIBODY</b>	<b>DETECTION ANTIBODY</b>
	6402	6402, 6403, 6405, 6407
	6403, 6405, 6407	6402

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.

<b>Product stability</b>	<b>TEMPERATURE, TIME</b>	<b>RESULT</b>
	-70 °C, 21 days	OK
	-20 °C, 21 days	OK
	+4 °C, 21 days	OK
	+25 °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** Note that CRP is a pentameric protein. The same antibody can thus be used both as a capture and a detection antibody.

**References** Käpyaho, K., Welin, M.-G., Tanner, P., Kärkkäinen, T. and Weber, T. (1989) Rapid determination of C-reactive protein by enzyme immunoassay using two monoclonal antibodies. Scand. J. Clin. Lab. Invest. 49:389-393

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