

## PRODUCT SPECIFICATIONS

Date: 2015-05-12

<b>PRODUCT NAME</b>	:	Anti-h IL-6 2706 SPTN-5
<b>PRODUCT SPECIFICITY</b>	:	Human Interleukin-6 (IL-6)
<b>PRODUCT CODE</b>	:	100330
<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>	:	24 months at 2-8 °C
<b>ANALYTE DESCRIPTION</b>	:	IL-6 is an interleukin that acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response to trauma, especially burns or other tissue damage leading to inflammation. IL-6 is relevant to many disease processes such as diabetes, atherosclerosis, depression, Alzheimer's Disease, systemic lupus erythematosus, cancer, and rheumatoid arthritis. There is an interest in developing anti-IL-6 agents as therapy against many of these diseases. The first such is tocilizumab which has been approved for rheumatoid arthritis.

## PARAMETERS TESTED FROM EACH LOT

<b>PRODUCT APPEARANCE</b>	:	Clear liquid, may turn opaque during storage
<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>	:	7.2 – 7.9
<b>PURITY</b>	:	≥ 95 %

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

<b>CLASS AND SUBCLASS</b>	:	IgG <sub>2a</sub>
<b>ASSOCIATION CONSTANT</b>	:	3.6 x 10 <sup>4</sup> 1/Ms
<b>DISSOCIATION CONSTANT</b>	:	1.5 x 10 <sup>-5</sup> 1/s
<b>AFFINITY CONSTANT</b>	:	KA = 2.5 x 10 <sup>9</sup> 1/M; KD = 4.1 x 10 <sup>-10</sup> M (=0.41 nM)
<b>DETERMINATION METHOD</b>	:	SPR analysis (BioRad ProteOn XPR36)
<b>ANTIGEN</b>	:	IL-6 (Creative Biomart cat.no. IL6-12H, lot#714033)
<b>CROSS-REACTIVITIES</b>	:	N/D

**EPITOPE** : N/D

**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.

<b>PAIR RECOMMENDATIONS</b>	<b>SOLID</b>	<b>LABEL</b>
	2706	2704

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.

<b>PRODUCT STABILITY</b>	<b>TEMPERATURE, DAYS</b>	<b>RESULT</b>
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
	+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. The maximum duration of the test is 21 days, except for the +45 °C only 7 days.

<b>pH, 14 DAYS, +4 °C</b>	<b>RESULT</b>
5.0	OK
6.0	OK
7.0	OK
8.0	OK

Stability testing is performed to see whether pH affects the antigen binding, charge or composition of the antibody during 14 days at +4 °C.

**MISCELLANEOUS** : -

**REFERENCES** : -

### Legal disclaimer

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