

Product specifications

Name	Anti-h IL-6 2703 SPTN-5
Specificity	Antibody recognizes human interleukin-6 (IL-6)
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
Product code	100328
Product buffer solution	50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	24 months from manufacturing at 2–8 °C
Subclass	IgG ₁
Analyte description	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.

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	6.3–7.6
Purity	≥ 95 %

Kinetic parameters

Association rate constant	1.0 x 10 ⁵ 1/Ms	6.1 x 10 ⁶ 1/Ms
Dissociation rate constant	5.6 x 10 ⁻⁵ 1/s	4.8 x 10 ⁻⁵ 1/s
Affinity constant	K _A = 1.8 x 10 ⁹ 1/M K _D = 5.6 x 10 ⁻¹⁰ M (=0.56 nM)	K _A = 1.3 x 10 ¹¹ 1/M K _D = 7.7 x 10 ⁻¹¹ M (=0.08 nM)
Determination method	SPR analysis (ProteOn XPR36)	BLI (Octet RED96e)
Determination antigen	IL-6, Creative Biomart (Cat IL6-12H, Lot 714033)	IL-6, Lee Biosolutions (Cat 341-36, Lot 10E5837)

Cross-reactivities Not Determined (N/D)

Epitope N/D

Pair recommendations

		DETECTION			
		2703	2704	2706	2707
CAPTURE	2703	-	+	-	+
	2704	+	-	+	+
	2706	-	-	-	+
	2707	+	-	+	-

Following pairs are especially recommended for the below mentioned assays:

FIA: 2706 (capture) – 2707 (detection) and 2703 – 2707

LF: 2704 (membrane) – 2703 (particles), 2704 – 2707, 2704 – 2706 and 2703 – 2704

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, LF

Antigens tested Recombinant IL-6 antigen, Medix Biochemica 710015, 710039, 710038 and recombinant IL-6 antigen Lee Biosolutions 341-36.

Product stability	TEMPERATURE, TIME	RESULT
	-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 -

References -