

Product specifications

Name	Anti-h PG I 8003 SPRN-5
Specificity	Antibody recognizes human pepsinogen I
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
Product code	100120
Product buffer solution	37 mM citrate, 125 mM phosphate, pH 6.0, 0.9 % NaCl, 0.095 % NaN ₃ as a preservative
Shelf life and storage	36 months from manufacturing at 2–8 °C
Subclass	IgG ₁
Analyte description	Pepsinogen is the pro-form of pepsin and is produced in the stomach by chief cells. The major part of pepsinogen is secreted into the gastric lumen but a small amount can be found in the blood. Alterations in the serum pepsinogen concentrations has been found with <i>Helicobacter pylori</i> (<i>H. pylori</i>) infections, peptic ulcer disease, gastritis, and gastric cancer. More precise analysis may be achieved by measuring the pepsinogen I/II ratio.

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	6.5–7.3
Purity	≥ 95 %

Kinetic parameters

Association rate constant	Not Determined (N/D)
Dissociation rate constant	N/D
Affinity constant	4 x 10 ¹⁰ 1/M
Determination method	Radioimmunoassay (RIA)
Determination antigen	PG I, Medix Biochemica in-house (A125-126-116/92)

Cross-reactivities	Human Pepsinogen II	0.03 % (Medix Biochemica in-house, A87/94)
	Porcine Pepsinogen	0.92 % (Sigma, Cat P-4656, Lot 82H8065)
	Gastrin I	< 0.01 % (Sigma, Cat G-9020, Lot 110H48131)
	Somatostatin	< 0.01 % (Sigma, Cat S-9129, Lot 81H00471)
	Peptide YY	< 0.01 % (Sigma, Cat P-1306, Lot 90H48992)
	Bombesin	< 0.01 % (Sigma, Cat B-4272, Lot 82H58501)
	Cathepsin D	< 0.06 % (Sigma, Cat C-8696, Lot 46H0795)

Epitope N/D

Pair recommendations

		DETECTION			
		8003	8009	8015	8016
CAPTURE	8003	-	+	+	+
	8009	+	-	+	-
	8015	+	+	-	+
	8016	+	+	-	-

Following pairs are especially recommended for the below mentioned assays:
 FIA: 8003 (capture) – 8009 (detection), 8003 – 8015, 8015 – 8003, 8016 – 8003 and 8016 – 8009
 LF: 8003 (membrane) – 8009 (particles), 8003 – 8015, 8009 – 8015 and 8015 – 8009
 IT: 8003 – 8016

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, IT

Antigens tested Recombinant Pepsinogen I antigen, Medix Biochemica 610000 and native Pepsinogen I antigen Lee Biosolutions 440-50.

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 -

