

Product specifications

Name	Anti-h IgG 7701 SPRN-5
Specificity	Antibody recognizes human immunoglobulin G
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100087
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 _{2a}
Analyte description	Immunoglobulin G (IgG) is a monomeric immunoglobulin, built of two heavy chains and two light chains. Each IgG has two antigen binding sites. It is the most abundant immunoglobulin and is approximately equally distributed in blood and in tissue liquids, constituting 75 % of serum immunoglobulins in humans. There are four IgG subclasses (IgG1, 2, 3 and 4) in humans, named in order of their abundance in serum (IgG1 being the most abundant).

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	6.7–7.8
Purity	≥ 95 %

Kinetic parameters

Association rate constant	Not Determined (N/D)
Dissociation rate constant	N/D
Affinity constant	$K_A = 2 \times 10^{10} \text{ 1/M}$
Determination method	Radioimmunoassay (RIA)
Determination antigen	IgG, Scripps Laboratories (Cat I1424, Lot 484183)

Cross-reactivities	Human IgG ₁ 147 % (Chemicon, Cat AG502, Lot 030BCS3)
	Human IgG ₂ 150 % (Chemicon, Cat AG504, Lot 212CCH)
	Human IgG ₃ 94 % (Chemicon, Cat AG506, Lot 030BCS4)
	Human IgG ₄ 2.1 % (Chemicon, Cat AG508, Lot 107BCS)
	Human IgM 0.6 % (Scripps Laboratories, Cat I1124, Lot 794283)
	Human IgA 0.3 % (Scripps Laboratories, Cat I2224, Lot 127283)
	Goat IgG < 0.01 % (Chemicon, Cat PP40, Lot 1250CM)
	Rabbit IgG < 0.01 % (Chemicon, Cat PP64, Lot 3080CM)
	Equine IgG < 0.01 % (Chemicon, Cat PP30, Lot 310JCI1)
	Porcine IgG < 0.01 % (Chemicon, Cat AG114, Lot 154JCI1)
	Bovine IgG < 0.01 % (Chemicon, Cat PP03, Lot 012291CHM3)
	Ovine IgG < 0.01 % (Chemicon, Cat PP44, Lot 0630CM)

Epitope Recognizes an epitope in the Fc region of IgG

Pair recommendations N/D

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 IgG antigen Lee Biosolutions 340-28.

Product stability	TEMPERATURE, TIME	RESULT
	-70 °C, 21 days	N/D
	-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 Roivainen, M., Alfthan, G., Jousilahti, P., Kimpimäki, M., Hovi, T., and Tuomilehto, J., (1998) Enterovirus infections as a possible risk factor for myocardial infarction. *Circulation*, 98:2534-2537

