

Product specifications

Name	Anti-h GH 5801 SP-1
Specificity	Antibody recognizes human growth hormone (GH)
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100041
Product buffer solution	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	Growth hormone (GH) is a single-chain polypeptide hormone that is synthesized, stored, and secreted by the anterior pituitary gland. It stimulates growth and cell reproduction and regeneration in humans and other animals. Growth hormone is used clinically to treat children's growth disorders and adult growth hormone deficiency.

Parameters tested on each lot

Product appearance	Liquid, may turn slightly opaque during storage
Product concentration	1.0 mg/ml (+/- 10 %)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.1–7.4
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	GH, Boehringer (Cat 252964, Lot 1222303)

Cross-reactivities PRL 1.0 % (International Laboratory Service, Lot 11385)
 PL 0.2 % (UCB-Bioproducs, Cat i020, Lot 007)

Epitope N/D

Pair recommendations

		DETECTION	
		5801	5802
CAPTURE	5801	-	-
	5802	+	-

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 GH antigen Lee Biosolutions 996-21.

TEMPERATURE, TIME	RESULT
-70 °C, 21 days	N/D
-20 °C, 21 days	N/D
+4 °C, 21 days	N/D
+35 °C, 7 days	N/D
+35 °C, 21 days	N/D
+45 °C, 3 days	N/D
+45 °C, 7 days	N/D

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 The antibody recognizes growth hormone isoform 22K, and does not recognize isoform 20K. Others not tested.

References Erb, T., Karolyi, G., Pampalone, A., Eberle, A.N., Baumann, J.B., Bürgisser, E., and Girard, J., (1988) Human growth hormone in urine: development of an ultrasensitive radiometric assay. *Experientia*, 44:155-157

