

## Product specifications

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Name	Anti-h SHBG 6007 SP-5
Specificity	Antibody recognizes human sex hormone-binding globulin
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100569
Product buffer solution	0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
Shelf life and storage	24 months from manufacturing at 2–8 °C
Subclass	IgG <sub>1</sub>
Analyte description	Sex hormone-binding globulin (SHBG) is a glycoprotein that binds to sex hormones, specifically testosterone and estradiol. Only a small fraction is unbound, or "free," and thus biologically active and able to enter a cell and activate its receptor. Conditions with low SHBG include polycystic ovary syndrome, diabetes, and hypothyroidism. Conditions with high SHBG include pregnancy, hyperthyroidism, and anorexia nervosa.

## Parameters tested on each lot

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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	6.0–6.9
Purity	≥ 95 %

## Kinetic parameters

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Association rate constant	$k_{on} = 1.2 \times 10^5$ 1/Ms
Dissociation rate constant	$k_{off} = 2.3 \times 10^{-4}$ 1/s
Affinity constant	$K_A = 0.5 \times 10^9$ 1/M; $K_D = 1.9 \times 10^{-9}$ M (=1.9 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	SHBG, Biosite (Cat PHP147, Lot 160506)

**Cross-reactivities** Does not recognize Corticosteroid binding globulin (CBG).

**Epitope** Not Determined (N/D)

**Pair recommendations**

		DETECTION		
		6001	6002	6007
CAPTURE	6001	-	+	+
	6002	-	-	-
	6007	+	-	-

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** N/D

Product stability	TEMPERATURE, TIME	RESULT
	-70 °C, 21 days	OK
	-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** -

