



2021-03-19

## **Product specifications**

Name Anti-h SHBG 6001 SP-5

Specificity Antibody recognizes human sex hormone-binding globulin

Description Monoclonal mouse antibody, cultured *in vitro* under conditions free from animal-derived

components.

Product code 100539

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

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 6.2–6.9

Purity ≥ 95 %

## Kinetic parameters

Association rate constant  $k_{on} = 4.1 \times 10^5 \text{ 1/Ms}$ 

Dissociation rate constant  $k_{off} = 4.7 \times 10^{-5} \text{ 1/s}$ 

Affinity constant  $K_A = 8.8 \times 10^9 \text{ 1/M}$ ;  $K_D = 1.2 \times 10^{-10} \text{ M}$  (=0.12 nM)

Determination method SPR analysis (ProteOn XPR36)

Determination antigen SHBG, Scripps Laboratories (Cat S1725, Lot 2334401)





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Cross-reactivities Corticosteroid binding globulin < 0.2 % (UCB-Bioproducts, Cat i097, Lot 002-1)

Thyroxine binding globulin < 0.04 % (Scripps, Cat T0414, Lot 780095)

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 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 -

References -