

## PRODUCT SPECIFICATIONS

<b>Name</b>	Anti-h SHBG 6002 SP-5
<b>Specificity</b>	Antibody recognizes human sex hormone-binding globulin
<b>Description</b>	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components
<b>Product code</b>	100540
<b>Product buffer solution</b>	0.9 % NaCl, 0.095 % NaN <sub>3</sub> as a preservative
<b>Shelf life and storage</b>	24 months from manufacturing at 2-8 °C
<b>Analyte description</b>	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

<b>Product appearance</b>	Liquid, may turn slightly opaque during storage
<b>Product concentration</b>	5.0 mg/ml (+/- 10 %)
<b>Immunoreactivity</b>	80-120 % compared to the reference sample in an FIA test
<b>IEF Profile</b>	6.6 - 7.3
<b>Purity</b>	≥ 95 %

## PARAMETERS DETERMINED DURING PRODUCT DEVELOPMENT

<b>Subclass</b>	IgG <sub>1</sub>
<b>Association rate constant</b>	$k_{on} = 1.5 \times 10^5$ 1/Ms
<b>Dissociation rate constant</b>	$k_{off} = 1.0 \times 10^{-4}$ 1/s
<b>Affinity constant</b>	$K_A = 1.5 \times 10^9$ 1/M; $K_D = 6.8 \times 10^{-10}$ M (=0.68 nM)
<b>Determination method</b>	SPR-analysis (ProteOn XPR36)
<b>Determination antigen</b>	SHBG, Scripps Laboratories (Cat S1725, Lot 2334401)

### Legal disclaimer

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### Oy Medix Biochemica Ab

**Headquarters and manufacturing**  
Klovinpellontie 3  
FI-02180 Espoo, Finland

medix@medixbiochemica.com  
www.medixbiochemica.com  
VAT reg. no. FI4631532

**Cross-reactivities** Corticosteroid Binding Globulin < 0.2 % (UCB-Bioproducts, Cat i097, Lot 002-1)  
Thyroxine Binding Globulin < 0.2 % (Scripps, Cat T0414, Lot 780095)

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

**Pair recommendations**

<b>CAPTURE ANTIBODY</b>	<b>DETECTION ANTIBODY</b>
6001	6002

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.

**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** -