

PRODUCT SPECIFICATIONS

Date: 2011-10-20

PRODUCT NAME	: Anti-h SHBG 6002 SP-1
PRODUCT SPECIFICITY	: Antibody recognizes human Sex Hormone-Binding Globulin
PRODUCT CODE	: 100051
PRODUCT BUFFER	: 0.9 % NaCl, 0.1 % NaN ₃ as a preservative
SHELF LIFE AND STORAGE	: 24 months from manufacturing at 2-8 °C
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. There has recently been research to link high SHBG levels with breast and testicular cancer as well.

PARAMETERS TESTED FROM EACH LOT

PRODUCT APPEARANCE	: Clear liquid
PRODUCT CONCENTRATION	: 1.00 mg/ml (+/- 10 %)
PRODUCT ACTIVITY	: 80-120 % compared to reference in an IFMA-test
IEF-RANGE	: 6.1 - 7.1
PURITY	: ≥ 95 %

PARAMETERS DETERMINED ONLY DURING PRODUCT R&D PHASE

CLASS AND SUBCLASS	: IgG ₁
ASSOCIATION CONSTANT	: $k_{on} = 1.5 \times 10^5$ 1/Ms
DISSOCIATION CONSTANT	: $k_{off} = 1.0 \times 10^{-4}$ 1/s
AFFINITY CONSTANT	: $K_A = 1.5 \times 10^9$ 1/M; $K_D = 6.8 \times 10^{-10}$ M (=0.68 nM)
DETERMINATION METHOD	: SPR-analysis, ProteOn XPR36
ANTIGEN	: SHBG, Scripps Laboratories (Cat.no. S1725; Lot 2334401)
CROSS-REACTIVITIES	: Corticosteroid Binding Globulin < 0.2 % (UCB-Bioproducts Cat No i097 Lot 002-1) Thyroxine Binding Globulin < 0.2 % (Scripps Cat No T0414 Lot 780095)

EPITOPE : N/D

EPITOPE GROUP : -

Two antibodies binding to the same, or closely located epitopes, belong to the same group and hence cannot be used as a pair in a sandwich assay. Epitope group numbering does not give any detailed information where the epitope is located.

PAIR RECOMMENDATIONS :

SOLID	LABEL
6001	6002

Please note that pair recommendations are based on results obtained in our laboratory. Equally good results may be obtained using other pairs and therefore these recommendations should be taken only as a directive.

PRODUCT STABILITY :

TEMPERATURE, DAYS	RESULT
-70 °C, 21 days	N/D
-20 °C, 21 days	N/D
+4 °C, 21 days	N/D
+25 °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

Please note that the shelf life given on page one is based on real time stability testing at +2-8 °C in the product buffer.

Stability testing is performed in the product buffer to see whether different temperatures affect the antigen binding, charge or composition of the antibody. The maximum duration of the test is 21 days, except for the +45 °C only 7 days.

pH, 14 DAYS, +4 °C	RESULT
5.0	N/D
6.0	N/D
7.0	N/D
8.0	N/D

Stability testing is performed to see whether pH affects the antigen binding, charge or composition of the antibody during 14 days at +4 °C.

MISCELLANEOUS : -

REFERENCES : -

Legal disclaimer

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