

PRODUCT SPECIFICATIONS

Date: 2012-09-05

PRODUCT NAME	: Anti-h Hemoglobin 7202 SPR-5
PRODUCT SPECIFICITY	: Antibody recognizes human Hemoglobin (A ₀ and A ₁ equally well, A ₂ with lower affinity, and A _s with very low affinity)
PRODUCT CODE	: 100079
PRODUCT BUFFER	: 37 mM citrate, 125 mM phosphate, pH 6.0, 0.1 % NaN ₃ as a preservative
SHELF LIFE AND STORAGE	: 36 months from manufacturing at 2-8 °C
ANALYTE DESCRIPTION	: Hemoglobin (Hb) is the iron-containing oxygen-transport metalloprotein in the red blood cells of vertebrates, and the tissues of some invertebrates. In mammals, the protein makes up about 97 % of the red blood cell's dry content, and around 35 % of the total content (including water). Hemoglobin transports oxygen from the lungs to the rest of the body and CO ₂ back from the tissues to the lungs. It also has a variety of other roles of gas transport and effect-modulation which vary from species to species, and are quite diverse in some invertebrates. Hemoglobin variants are a part of the normal embryonic and fetal development, but may also be pathologic mutant forms of hemoglobin in a population, caused by variations in genetics. Some well-known hemoglobin variants such as sickle-cell anemia are responsible for diseases, and are considered hemoglobinopathies. Other variants cause no detectable pathology, and are thus considered non-pathological variants.

PARAMETERS TESTED FROM EACH LOT

PRODUCT APPEARANCE	: Clear liquid
PRODUCT CONCENTRATION	: 5.0 mg/ml (+/- 10 %)
PRODUCT ACTIVITY	: 80 – 120 % compared to reference in an IFMA-test
IEF-RANGE	: 5.7 – 6.5
PURITY	: ≥ 95 %

PARAMETERS DETERMINED ONLY DURING PRODUCT R&D PHASE

CLASS AND SUBCLASS	: IgG ₁
ASSOCIATION CONSTANT	: N/D
DISSOCIATION CONSTANT	: N/D
AFFINITY CONSTANT	: 1 x 10 ¹⁰ l/mol
DETERMINATION METHOD	: Radioimmunoassay (RIA)
ANTIGEN	: Hemoglobin (Sigma Cat No H-7379 Lot 68F-9307)
CROSS-REACTIVITIES	: Albumin < 0.01 % (ICN Cat No 82-301 lot 37) Haptoglobin < 0.4 % (Sigma Cat No H-1511 Lot 48F9313) Myoglobin < 0.03 % (Chemicon Cat No AG35P Lot 021287M) Tranferrin < 0.01 % (Sigma Cat No T-3400 Lot 62H9330)

Clone 7202 does not cross-react with bovine, sheep, horse or pig hemoglobin.

EPITOPE : -

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
7202	7204

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	OK
+4 °C, 21 days	OK
+30 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 7 days	OK

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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