

2023-01-26

# Anti-h Transferrin 3106 SPTN-5

### **Product overview**

Catalog number 100474

**Specificity** Antibody recognizes human transferrin

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

animal-derived components.

Product buffer solution 50 mM Na-citrate, pH 6.0, 0.9 % NaCl, 0.095 % NaN<sub>3</sub> as a preservative

Shelf life and storage 36 months from manufacturing at 2–8 °C

 $\hbox{Subclass} \hspace{2cm} \hbox{Ig} G_{2a}$ 

Analyte description Transferrins are glycoproteins which regulate the amount of free iron in

circulation. Each transferrin molecule binds two Fe<sup>+3</sup> with high affinity. When no iron is bound the molecule is called Apotransferrin. Transferrin concentration elevates in anemia, but also during pregnancy and when using birth control pills. Chronic infections, malignant growth, alcohol induced liver damage, and other conditions with protein loss may lower

transferrin concentration.

### 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** 6.2–8.5

**Purity**  $\geq 95 \%$ 

### Kinetic parameters

**Association rate constant** 2.2 x 10<sup>6</sup> 1/Ms

**Dissociation rate constant** 1.1 x 10<sup>-4</sup> 1/s

**Affinity constant**  $K_A = 2.1 \times 10^{10} \text{ 1/M}; K_D = 4.8 \times 10^{-11} \text{ M} (=0.048 \text{ nM})$ 

**Determination method** SPR analysis (ProteOn XPR36)

**Determination antigen** Transferrin native human, AbD Serotec (Cat PHP-238, Lot 171210)





# Product specification ANTIBODY

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Cross-reactivities Not Determined (N/D)

Epitope N/D

Pair recommendations

		DETECTION		
		3104	3105	3106
CAPTURE	3104	-	+	+
	3105	+	-	+
	3106	+	+	-

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, 7 days OK

+35 °C, 21 days

Minor charge alterations, precipitation observed

+45 °C, 3 days

Minor charge alterations,

precipitation observed

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 -

