

## Product specifications

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Name	Anti-h Transferrin 3105 SPTN-5
Specificity	Antibody recognizes human transferrin
Description	Monoclonal mouse antibody, cultured <i>in vitro</i> under conditions free from animal-derived components.
Product code	100440
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	18 months from manufacturing at 2–8 °C
Subclass	IgG <sub>1</sub>
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

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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	6.5–7.6
Purity	≥ 95 %

## Kinetic parameters

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Association rate constant	6.7 x 10 <sup>6</sup> 1/Ms
Dissociation rate constant	1.3 x 10 <sup>-5</sup> 1/s
Affinity constant	K <sub>A</sub> = 5.3 x 10 <sup>11</sup> 1/M; K <sub>D</sub> = 1.9 x 10 <sup>-12</sup> M (=0.002 nM)
Determination method	SPR analysis (ProteOn XPR36)
Determination antigen	Transferrin native human, AbD Serotec (Cat PHP-238, Lot 171210)

Cross-reactivities Does not recognize lactoferrin or hemoglobin.

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 Apotransferrin (Sigma, T2252)

TEMPERATURE, TIME	RESULT
-70 °C, 21 days	OK
-20 °C, 21 days	OK
+4 °C, 21 days	OK
+35 °C, 21 days	OK
+45 °C, 3 days	OK
+45 °C, 7 days	Minor charge alterations

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 -

