Medix Biochemica

Product specification
ANTIBODY
2022-09-19

Anti-h AFP 5107 SP-1

Product overview

Catalog number	100014
Specificity	Antibody recognizes human Alpha$_1$-fetoprotein
Description	Monoclonal mouse antibody, cultured *in vitro* under conditions free from animal-derived components.
Product buffer solution	0.9 % NaCl, 0.095 % NaN_3 as a preservative
Shelf life and storage	24 months from manufacturing at 2–8 °C
Subclass	IgG_1
Analyte description	AFP is a major plasma protein produced by fetus. AFP is measured in pregnancy as a screening test for developmental abnormalities. It is also used as a biomarker to detect certain tumors.

Parameters tested on each lot

Product appearance	Liquid, may turn slightly opaque during storage
Product concentration	1.0 mg/ml (+/- 10 %)
Immunoreactivity	80–120 % compared to the reference sample in an FIA test
IEF Profile	6.5–7.2
Purity	≥ 95 %

Kinetic parameters

Association rate constant	Not Determined (N/D)
Dissociation rate constant	N/D
Affinity constant	4 x 10^{10} 1/M
Determination method	Radioimmunoassay (RIA)
Determination antigen	AFP, DAKO (Cat X557, Lot 13C)

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Cross-reactivities

Does not recognize human albumin. Others not tested.

Epitope

N/D

Pair recommendations

		DETECTION	
		5107	5108
CAPTURE	5107	-	+
	5108	-	-

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

Native AFP antigen, Lee Biosolutions, 105-11.

Product stability

TEMPERATURE, TIME	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, 21 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

Authors in Koskinen et al. (2005) developed a dry- and wet-chemistry based assay methods for AFP with detection limits of 0.41 ng/mL and 0.67 ng/mL, respectively.

References

Koskinen, J.O., Meltola, N.J., Soini, E. and Soini, A.E. (2005) A lab-on-a-chip compatible bioaffinity assay method for human α-fetoprotein. Lab Chip, 5:1408-1411

Stenman, U.-H., Sutinen, M.-L., Selander, R.-K., Tontti, K. and Schröder, J. (1981) Characterization of a monoclonal antibody to human alpha-fetoprotein and its use in affinity chromatography. J. Immunol. Meth., 46:337-345

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