

2023-05-23

Anti-h PIVKA-II 12106 SPTN-5

Product overview

Catalog number 100875

Specificity Antibody recognizes human PIVKA-II (Protein Induced Vitamin K absence

or Antagonist-II)

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 % NaN₃ as a preservative

Shelf life and storage Unspecified, storage at 2–8 °C

Subclass IgG₁

Analyte description Protein induced by vitamin K absence or antagonist-II (PIVKA-II), also

known as des- γ -carboxy prothrombin (DCP), is an abnormal form of prothrombin. In patients with hepatocellular carcinoma (HCC), γ -

carboxylation of prothrombin is impaired leading to formation of PIVKA-II, which can be used to assess the surveillance, diagnosis and management

of HCC.

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 5.7–6.7

Purity ≥ 95 %

Kinetic parameters

Association rate constant 1.6 x 10⁵ 1/Ms

Dissociation rate constant 7.7 x 10⁻⁶ 1/s

Affinity constant $K_A = 2.0 \times 10^{10} \text{ 1/M}; K_D = 4.8 \times 10^{-11} \text{ M} (= 0.05 \text{ nM})$

Determination method BLI (Octet RED96e)

Determination antigen Recombinant PIVKA-II, Genscript (Cat T06702)





Product specification ANTIBODY

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Cross-reactivities Does not recognize Prothrombin.

Epitope Amino acid region 1-17 (ANTFLEEVRKGNLEREC)

Pair recommendations

		DETECTION		
		12102	12103	12106
CAPTURE	12102	-	-	+
	12103	+	-	+
	12106	+	+	-

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, CLIA

Antigens tested Not Determined (N/D)

Product stability 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, 7 days OK

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

