

 **TUMOR**

## PRODUCT SPECIFICATIONS

**Date:** 2010-05-12

<b>PRODUCT NAME</b>	:	Anti-h CEA 5909 SP-1
<b>PRODUCT SPECIFICITY</b>	:	Antibody recognizes human Carcinoembryonic Antigen
<b>PRODUCT CODE</b>	:	100046
<b>PRODUCT BUFFER</b>	:	0.9 % NaCl, 0.1 % NaN <sub>3</sub> as a preservative
<b>SHELF LIFE AND STORAGE</b>	:	36 months from manufacturing at 2-8 °C
<b>ANALYTE DESCRIPTION</b>	:	Carcinoembryonic antigen (CEA) is a glycoprotein involved in cell adhesion. It is normally produced during fetal development, but the production of CEA stops before birth. Therefore, it is not usually present in the blood of healthy adults, but elevated levels have been found in individuals with carcinomas. CEA measurement is mainly used as a tumor marker to identify recurrences after surgical resection. CEA levels may also be raised in some non-neoplastic conditions like ulcerative colitis, pancreatitis and cirrhosis.

### PARAMETERS TESTED FROM EACH LOT

<b>PRODUCT APPEARANCE</b>	:	Clear liquid
<b>PRODUCT CONCENTRATION</b>	:	1.00 mg/ml (+/- 10 %)
<b>PRODUCT ACTIVITY</b>	:	80-120 % compared to reference in an IFMA-test
<b>IEF-RANGE</b>	:	5.8 - 6.4
<b>PURITY</b>	:	≥ 95 %

### PARAMETERS DETERMINED ONLY DURING PRODUCT R&D PHASE

<b>CLASS AND SUBCLASS</b>	:	IgG <sub>1</sub>
<b>ASSOCIATION CONSTANT</b>	:	
<b>DISSOCIATION CONSTANT</b>	:	
<b>AFFINITY CONSTANT</b>	:	3 x 10 <sup>10</sup> l/mol
<b>DETERMINATION METHOD</b>	:	Radioimmunoassay (RIA)
<b>ANTIGEN</b>	:	CEA, BIOSCAN (Cat No 100 Lot 118-1A)
<b>CROSS-REACTIVITIES</b>	:	No cross-reactivity with human NCA, NCA-2 or BGPI (biliary glycoprotein-1).

**EPITOPE**

:

**EPITOPE GROUP**

: Epitope group C (Bhayana et al., 1989)

If two antibodies binding to an analyte belong to the same group they bind to the same, or closely located epitopes, 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**

:

<b>SOLID</b>	<b>LABEL</b>
5909	5905
5909	5910

Please note that pair recommendations are based on results obtained in our laboratory and equally good results can be obtained using also other pairs and therefore these recommendations should be taken only as directive.

**PRODUCT STABILITY**

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<b>TEMPERATURE, DAYS</b>	<b>RESULT</b>
-70 °C, 21 days	
-20 °C, 21 days	
+4 °C, 21 days	
+25 °C, 21 days	
+35 °C, 7 days	
+35 °C, 21 days	
+45 °C, 3 days	
+45 °C, 7 days	

<b>pH, 14 DAYS, +4 °C</b>	<b>RESULT</b>
5.0	
6.0	
7.0	
8.0	

**MISCELLANEOUS**

:

In Bhayana et al. (1989) authors made an epitope mapping for 11 monoclonal antibodies from Medix Biochemica and they found that the antibodies bound to 5 different epitope groups (A to F) and 5909 was found to bind to epitope group C.

**REFERENCES**

:

Bhayana, V., and Diamandis, E.P., (1989) A double monoclonal time-resolved immunofluorometric assay of carcinoembryonic antigen is serum. Clin. Biochem., 22:433-438

**Legal disclaimer**

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