IBL Data Sheet

Code No. 10221

Anti-Human
Napsin A (TMU-Ad02) Mouse IgG MoAb

Volume : 50 µg

Introduction : Recently, a new protein isolated by two-dimensional immuno-electrophoresis from tissue of lung adenocarcinoma was identified as Napsin A, a new aspartic Proteinase. The reactivity of the antibody showed immunohistochemically in type II pneumocytes, alveolar macrophages, renal tubules and exocrine glands and ducts in pancreas. In particular, type II pneumocytes and alveolar macrophages showed strong staining. The specificity of the antibody is very interesting, which in primary lung adenocarcinoma, 47 out of 58 (81.0%) primary lesions were positive. All well-differentiated adenocarcinoma except those of goblet type showed strong staining. The antibody may be a useful tool as a tumor marker for primary lung adenocarcinoma.

Antigen : Synthetic peptide of the N-terminal part of human Napsin A

Source : Mouse-Mouse hybridoma
(X63 - Ag 8.653 × BALB/c mouse spleen cells)

Clone : TMU-Ad02 **Subclass** : IgG_1

Purification : Affinity purified with antigen peptide

Form : Lyophilized product from in PBS containing 1 % BSA and 0.05 % NaN_3

How to use : 1.0 mL deionized water will be added to the product, then its concentration comes to 50 µg/mL

Stability : Lyophilized product, 5 years at 2 - 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues by several techniques. The optimal concentration is 0.5 - 1 µg/mL, however, the concentration should be optimized by each laboratory.
: This antibody can be used for western blotting in concentration of 0.5 - 1 µg/mL

Specificity : **Immunohistochemical study in histopathological types of lung carcinoma**

Histology	Expression levels of the antibody				Positive Rate (%)
	2+	+	+/-	-	
Adenocarcinoma	25	11	11	11	81.0
Well-differentiated	16	3	0	0	100.0
Moderately differentiated	8	2	4	4	77.8
Poorly differentiated	1	6	7	7	66.7
Squamous cell carcinoma	0	0	0	14	0
Large cell carcinoma	0	0	2	5	28.6
Small cell carcinoma	0	0	0	9	0
Undifferentiated carcinoma	0	0	0	1	0
Carcinoid tumor	0	0	0	2	0

Reference :

1. Hirano T, Auer G, Maeda M, Hagiwara Y, Okada S, Ohira T, Okuzawa K, Fujioka K, Franzén B, Hibi N, Seito T, Ebihara Y, Kato H. Human tissue distribution of TA02, which is homologous with a new type of aspartic proteinase, napsin A. Jpn J Cancer Res. 2000 Oct;91(10):1015-21.
2. Hirano T, Gong Y, Yoshida K, Kato Y, Yashima K, Maeda M, Nakagawa A, Fujioka K, Ohira T, Ikeda N, Ebihara Y, Auer G, Kato H. Usefulness of TA02 (napsin A) to distinguish primary lung adenocarcinoma from metastatic lung adenocarcinoma.
3. Dejmek A, Naucler P, Smedjeback A, Kato H, Maeda M, Yashima K, Maeda J, Hirano T. Napsin A (TA02) is a useful alternative to thyroid transcription factor-1 (TTF-1) for the identification of pulmonary adenocarcinoma cells in pleural effusions. Diagn Cytopathol. 2007 Aug;35(8):493-7.

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