

**Mouse Anti-Napsin A [NAPSA/3308]: MC0201, MC0201RTU7**

**Intended Use:** For Research Use Only

**Description:** Napsin A has a specific function in normal alveolar epithelium and is proposed to play a role in the proteolytic processing of surfactant precursors. Napsin A is reported to be predominantly expressed in lamellar bodies of type II pneumocytes, secondary lysosomes of alveolar macrophages, respiratory epithelium of terminal and respiratory bronchioles, plasma cells, within a subset of lymphocytes in normal lung, as well as in epithelial cells of renal tubules in normal kidney and is weakly expressed in normal spleen. Napsin A is an aspartic proteinase that belongs to the peptidase A1 family and plays a role in pneumocyte surfactant processing. In normal tissue, Anti-Napsin A specifically labels type II pneumocytes in adult lung and epithelial cells in kidney tissues. In abnormal tissues, Studies have reported that Napsin A is expressed in 90% of primary lung adenocarcinomas. Napsin A and 79% of renal cell carcinoma by immunohistochemistry. Napsin A is a useful marker for lung adenocarcinoma. The combined use of Napsin A and thyroid transcription factor (TTF) improves the sensitivity and specificity for identification of pulmonary adenocarcinoma.

**Specifications**

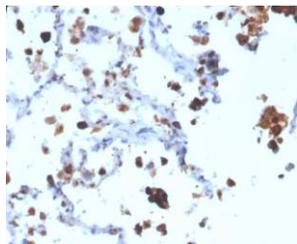
Clone: NAPSA/3308  
Source: Mouse  
Reactivity: Human  
Isotype: IgG1k  
Localization: Cytoplasm  
Formulation: Antibody in PBS pH 7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC  
Package:

Description	Catalog No.	Size
Napsin A Concentrated	MC0201	1 ml
Napsin A Prediluted	MC0201RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Lung carcinoma  
Concentrated Dilution: 50-200  
Pretreatment: Tris EDTA pH9.0 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human lung adenocarcinoma stained with anti-Napsin A using DAB

**References:**

1. Napsin A staining in adrenal cortical neoplasms. Ballard M, et al. Arch Pathol Lab Med. Jul;137(7):883, 2013.
2. Value of PAX8, PAX2, napsin A, carbonic anhydrase IX, and claudin-4 immunostaining in distinguishing pleural epithelioid mesothelioma from metastatic renal cell carcinoma. Ordóñez NG. Mod Pathol. Aug;26(8):1132-43, 2013.
3. Comparison of monoclonal napsin A, polyclonal napsin A, and TTF-1 for determining lung origin in metastatic adenocarcinomas. Mukhopadhyay S, et al. Am J Clin Pathol., Nov;138(5):703-11, 2012.
4. TTF-1 and Napsin A double stain: a useful marker for diagnosing lung adenocarcinoma on fine-needle aspiration cell blocks. Fatima N, et al. Cancer Cytopathol. Apr 25;119(2):127-33, 2011.
5. Cathepsin H and napsin A are active in the alveoli and increased in alveolar proteinosis., Woischnik M, et al. Eur Respir J. Jun;31(6):1197-204, 2008.