

**Mouse Anti-Napsin A [MD46]: MC0133, MC0133RTU7**

**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**

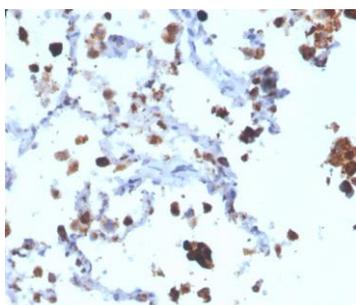
|               |   |
|---------------|---|
| Clone:        | MD46  |
| Source:       | Mouse   |
| Isotype:      | IgG1k   |
| Reactivity:   | Human   |
| Immunogen:    | Recombinant human Napsin A protein fragment aa189-299                           |
| Localization: | Cytoplasm   |
| Formulation:  | Purified antibody in PBS pH 7.4, containing BSA and ≤ 0.09% sodium azide (NaN3) |
| Storage:      | Store at 2°- 8°C  |
| Applications: | IHC   |
| Package:      |   |

| Description           | Catalog No. | Size |
|-----------------------|-------------|------|
| Napsin A Concentrated | MC0133      | 1 ml |
| Napsin A Prediluted   | MC0133RTU7  | 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.

Doc. 100-MC0133  
Rev. B