

PRODUCT INFORMATION



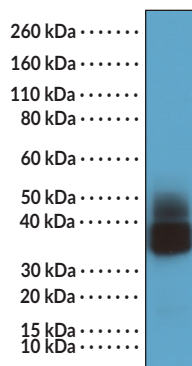
Napsin A (N-Term) Rabbit Monoclonal Antibody (Clone RM366)

Item No. 32291

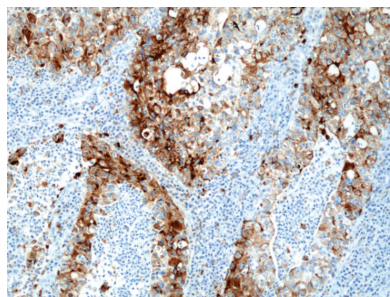
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	Kidney-derived Aspartic Protease-like Protein, NAPA, Napsin A Aspartic Peptidase, Napsin-1
Immunogen:	Peptide from the N-terminal region of human napsin A
Cross Reactivity:	(+) Napsin A
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM366
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:500-1:2,000 for IHC and 1:1,000-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

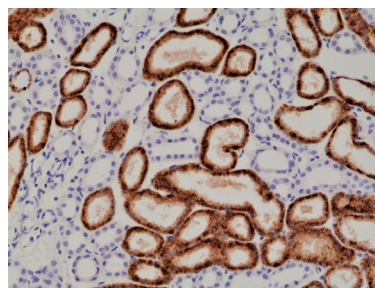
Images



WB of human lung tissue lysate using Napsin A (N-Term) Rabbit Monoclonal Antibody (Clone RM366) at a dilution of 1:2,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human lung adenocarcinoma tissue using Napsin A (N-Term) Rabbit Monoclonal Antibody (Clone RM366) at a dilution of 1:2,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human kidney tissue using Napsin A (N-Term) Rabbit Monoclonal Antibody (Clone RM366) at a dilution of 1:1,000.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Napsin A is an aspartic protease.^{1,2} It is composed of an N-terminal signaling peptide, a prodomain, and a single protein chain, which shares 40 to 50% sequence homology with cathepsins D and E and contains an 18 amino acid C-terminal extension.² Napsin A is expressed in the renal cortex and outer medulla, alveolar macrophages, and type I pneumocytes, as well as type II pneumocytes, where it has a role in surfactant protein processing.^{2,3} Napsin A is found in patient-derived lung adenocarcinomas and nephrogenic adenomas but not lung small cell or thyroid carcinomas.^{4,5} Cayman's Napsin A (N-Term) Rabbit Monoclonal Antibody (Clone RM366) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Schauer-Vukasinovic, V., Bur, D., Kling, D., *et al.* Human napsin A: Expression, immunochemical detection, and tissue localization. *FEBS Lett.* **462(1-2)**, 135-139 (1999).
2. Giller, T. and Schauer-Vukasinovic, V. Napsin A. *Handbook of proteolytic enzymes*. Barrett, A., Woessner, J., Rawlings, N., editors, 2nd edition, *Academic Press* (2004).
3. Brasch, F., Ochs, M., Kahne, T., *et al.* Involvement of napsin A in the C- and N-terminal processing of surfactant protein B in type-II pneumocytes of the human lung. *J. Biol. Chem.* **278(49)**, 49006-49014 (2003).
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5. Sharifai, N., Abro, B., Chen, J.-F., *et al.* Napsin A is a highly sensitive marker for nephrogenic adenoma: An immunohistochemical study with a specificity test in genitourinary tumors. *Hum. Pathol.* **102**, 23-32 (2020).

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