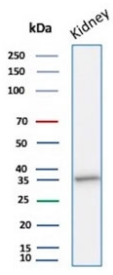
NAPSA Antibody / Secretory Pathway Antibody [clone rNAPSA/1239] (V3634)

Catalog No.	Formulation	Size
V3634-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3634-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3634SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3634IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

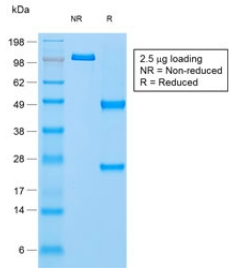
Recombinant MOUSE MONOCLONAL

Bulk quote request

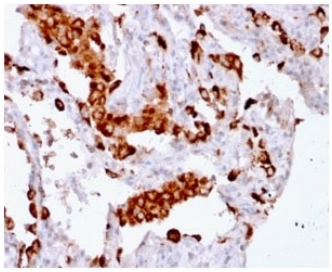
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rNAPSA/1239
Purity	Protein G affinity chromatography
UniProt	O96009
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 2-4ug/ml
Limitations	This NAPSA Antibody / Secretory Pathway Antibody is available for research use only.



NAPSA Antibody for WB. Western blot analysis of Napsin A (NAPSA) expression in human kidney tissue lysate demonstrates a band at approximately 38-45 kDa, consistent with the predicted molecular weight of this lysosomal aspartic protease. Clone rNAPSA/1239 detects Napsin A with a defined signal corresponding to intracellular protein localized to secretory and vesicular compartments, reflecting its role in epithelial protein trafficking and processing.



SDS-PAGE analysis of purified, BSA-free recombinant Napsin A antibody (clone rNAPSA/1239) as confirmation of integrity and purity.



NAPSA Antibody for IHC. Immunohistochemistry analysis of Napsin A (NAPSA) expression in FFPE human lung adenocarcinoma demonstrates strong granular cytoplasmic HRP-DAB brown staining in tumor epithelial cells with minimal background in surrounding stromal regions. Clone rNAPSA/1239 highlights intracellular localization of Napsin A within vesicular compartments consistent with its role in secretory pathway protein trafficking and processing. HIER was performed by boiling tissue sections in pH 6 10mM citrate buffer for 10-20 minutes followed by cooling at RT for 20 minutes prior to staining.

Description

Napsin A (NAPSA) is a lysosomal aspartic protease primarily expressed in lung alveolar epithelial cells and renal tubular epithelium, where it functions within intracellular trafficking networks and secretory pathways. NAPSA Antibody / Secretory Pathway Antibody is designed to detect Napsin A in studies examining vesicular transport, protein localization, and compartment-specific processing. NAPSA antibody clone rNAPSA/1239, also referred to as Napsin A antibody, is widely used in investigations of epithelial cell trafficking and intracellular protein distribution.

Napsin A is localized to intracellular vesicles, including lysosomes and secretory compartments, where it participates in the processing and handling of proteins destined for secretion or degradation. Its distribution across these compartments reflects its involvement in vesicle-associated protein maturation and highlights its role in coordinating intracellular transport with enzymatic processing.

The function of Napsin A within the secretory pathway is closely linked to its role in surfactant protein maturation in lung epithelial cells. Its activity within vesicular compartments contributes to the proper folding, processing, and localization of proteins essential for pulmonary function, emphasizing its importance in epithelial cell specialization.

NAPSA antibody reagents used as secretory pathway antibodies enable detection of Napsin A within defined intracellular compartments, supporting analysis of vesicle-associated protein localization and trafficking dynamics. This provides valuable insight into how proteins are processed and transported within epithelial cells and how these processes may be altered in disease states.

The restricted expression pattern of Napsin A, with strong enrichment in lung and kidney tissues, provides a clear biological context for studying secretory pathway function. Its compartmentalized localization allows researchers to examine the relationship between intracellular trafficking, protease activity, and tissue-specific protein handling.

Overall, NAPSA antibody reagents used as secretory pathway antibodies provide insight into vesicular transport, intracellular compartmentalization, and protein trafficking, supporting research into epithelial cell biology and secretory system organization.

This antibody is part of a comprehensive NAPSA antibody collection developed to support Napsin A detection across IHC, WB, IF, and FACS applications in lung cancer and epithelial biology research.

Application Notes

Optimal dilution of the NAPSA Antibody / Secretory Pathway Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A recombinant fragment from the human protein (amino acids 189-299) was used as the immunogen for the recombinant Napsin A antibody.

Storage

Store the recombinant Napsin A antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Napsin A antibody, NAPSA intracellular antibody, Secretory vesicle protease antibody, NAPSA trafficking antibody