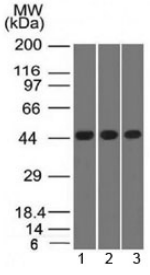
NAPSA Antibody for WB / Protein Detection Antibody [clone NAPSA/1238] (V2995)

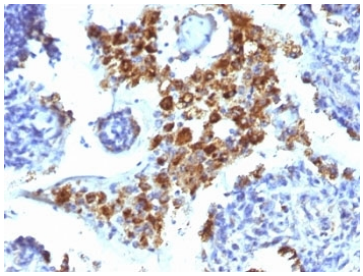
Catalog No.	Formulation	Size
V2995-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2995-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2995SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2995IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

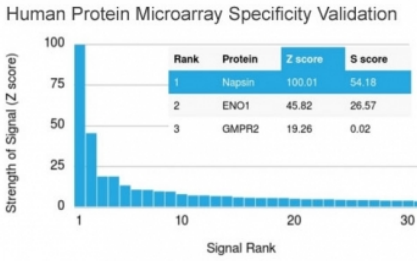
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	NAPSA/1238
Purity	Protein G affinity chromatography
UniProt	O96009
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This NAPSA Antibody for WB / Protein Detection Antibody is available for research use only.



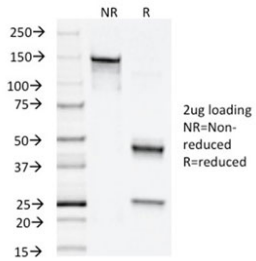
NAPSA Antibody for WB. Western blot analysis of Napsin A (NAPSA) expression in human cell lysates demonstrates a clear band at approximately 38-45 kDa in Lane 1: K562, Lane 2: HEK293, and Lane 3: A549. Clone NAPSA/1238 detects Napsin A with consistent signal intensity across all samples, with band size variation reflecting glycosylation-dependent processing of this lysosomal aspartic protease.



IHC: Formalin-fixed, paraffin-embedded human lung Adenocarcinoma stained with Napsin-A/NAPSA antibody (clone NAPSA/1238).



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Napsin A/NAPSA antibody (clone NAPSA/1238). These results demonstrate the foremost specificity of the NAPSA/1238 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free NAPSA Antibody for WB / Protein Detection Antibody (clone NAPSA/1238) as confirmation of integrity and purity.

Description

Napsin A (NAPSA) is a lysosomal aspartic protease primarily expressed in lung alveolar epithelial cells and renal tubular epithelium, where it functions in protein processing within secretory and lysosomal pathways. NAPSA Antibody for WB is designed for reliable protein detection in western blot assays, enabling accurate identification of Napsin A across diverse biological samples. NAPSA antibody, also known as Napsin A antibody, is widely used in studies of epithelial protease biology and intracellular protein processing.

Napsin A is synthesized as an inactive precursor that undergoes proteolytic cleavage to generate its mature enzymatically active form, resulting in multiple detectable species in western blot analysis. This processing, combined with intracellular compartmentalization in lysosomes and secretory vesicles, can contribute to band heterogeneity depending on sample type and preparation conditions. Expression is highest in lung and kidney tissues, with relatively restricted distribution in other organs, supporting its use as a tissue-associated protease marker.

This NAPSA Antibody for WB utilizes clone NAPSA/1238, a mouse monoclonal antibody developed for consistent and specific protein detection. The design of this antibody supports selective recognition of Napsin A in complex lysates, which is particularly important in western blot applications where non-specific binding can obscure interpretation. Supporting specificity data, including microarray-based assessment, further reinforces confidence in target recognition while maintaining a primary focus on robust protein detection performance.

In western blot experiments, NAPSA antibody detects bands corresponding to both precursor and processed forms of Napsin A, with observed molecular weights reflecting proteolytic maturation and potential post-translational modifications. The use of a specificity-driven monoclonal antibody contributes to cleaner banding patterns with reduced background signal, supporting clear identification of target protein in whole cell and tissue lysates. This is especially valuable when

analyzing samples with complex proteomes or when distinguishing closely migrating protein species.

The protein detection focus of this NAPSA antibody makes it well suited for experiments requiring accurate assessment of expression levels, processing states, and protein integrity. Its performance supports comparative studies across sample types, including evaluation of Napsin A expression in epithelial-derived cell lines and tissue extracts. This enables researchers to confidently interpret western blot results in the context of protein biology and expression profiling.

Overall, NAPSA antibody reagents optimized for western blot applications provide reliable and specific detection of Napsin A, supporting high-quality protein analysis with clear band resolution and minimal non-specific signal.

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 for WB / Protein Detection Antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.
2. 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 corresponding to amino acids 189-299 from the human protein was used as the immunogen for the Napsin A/NAPSA antibody.

Storage

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

Alternate Names

Napsin A antibody, NAPSA western blot antibody, Aspartic protease Napsin A antibody, NAPSA protein antibody