

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Napsin A in direct ELISAs and Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1265A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Napsin A Thr25-Gly420 Accession # O96009
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

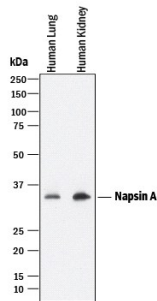
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunohistochemistry	1-25 µg/mL	See Below
Simple Western	5 µg/mL	See Below

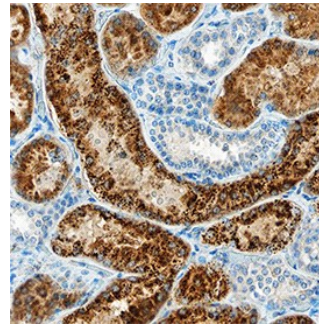
DATA

Western Blot



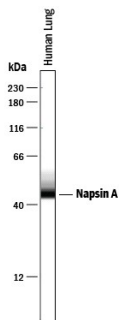
Detection of Human Napsin A by Western Blot. Western blot shows lysates of human lung tissue and human kidney tissue. PVDF membrane was probed with 0.5 µg/mL of Rabbit Anti-Human Napsin A Monoclonal Antibody (Catalog # MAB8489) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Napsin A at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



Napsin A in Human Kidney. Napsin A was detected in immersion fixed paraffin-embedded sections of human kidney using Rabbit Anti-Human Napsin A Monoclonal Antibody (Catalog # MAB8489) at 1 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in convoluted tubules. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human Napsin A by Simple Western™. Simple Western lane view shows lysates of human lung tissue, loaded at 0.2 mg/mL. A specific band was detected for Napsin A at approximately 46 kDa (as indicated) using 5 µg/mL of Rabbit Anti-Human Napsin A Monoclonal Antibody (Catalog # MAB8489). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Novel Aspartic Proteinase of the Pepsin Family or Napsin A is an aspartic proteinase that belongs to the peptidase A1 family and plays a role in pneumocyte surfactant processing. It consists of a 24-residue signal peptide, a 40-amino acid propeptide, the mature enzyme of 336 amino acids, and a C-terminal extension of 18 residues. Highest levels of Napsin A have been detected in adult lung (type II pneumocytes), fetal lung, and kidney tissues. Napsin A is also expressed at lower levels in adult spleen and at very low levels in peripheral blood leukocytes. Human napsin A shares 72.6% sequence identity with the mouse homolog.