GENE BIO SOLUTION

Napsin A(RM)

Format	Catalog No.	Pack size	Dilution
Concentrated	GB3043A,C	0.1, 1.0 mL	1:100
Prediluted	GB3043AA	6.0 mL	Ready to use

PRODUCT DESCRIPTION -

Napsin A is an aspartic proteinase like pepsin. It is expressed in type II pneumocytes, the majority of lung adenocarcinomas, and certain renal cell carcinomas. Research indicates that Napsin A is a more sensitive and specific marker compared to TTF-1 and is highly specific for lung adenocarcinomas. Numerous studies indicate that Napsin A exhibits greater specificity for lung adenocarcinoma in comparison to lung squamous cell carcinoma (SqCC).

INTENDED USE -

Napsin A [BC15] is a rabbit monoclonal antibody designed for laboratory applications to qualitatively identify Napsin A protein using immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical assessment of any staining or its absence must be supplemented by morphological analyses utilizing appropriate controls and should be interpreted in conjunction with the patient's clinical history and other diagnostic evaluations by a certified pathologist.

SUMMARY AND EXPLANATION -

Napsin A is an aspartic proteinase like pepsin. It is expressed in type II pneumocytes, the majority of lung adenocarcinomas, and certain renal cell carcinomas. Research indicates that Napsin A is a more sensitive and specific marker compared to TTF-1, demonstrating exceptional specificity for lung adenocarcinomas. Numerous studies indicate that Napsin A exhibits greater specificity for lung adenocarcinoma in comparison to lung squamous cell carcinoma (SqCC).

PRINCIPLE OF PROCEDURE -

Antigen detection in tissues and cells involves a multi-step immunohistochemistry process. The first step attaches the primary antibody to its designated epitope. Following the tagging of the antigen with a primary antibody, a one-, two-, or three-step detection protocol may be utilized. The one-step approach will utilize an enzyme-conjugated polymer that attaches to the main antibody. A two-step protocol will involve the addition of a secondary antibody to bind to the original antibody. An

enzyme-conjugated polymer is subsequently introduced to bind to the secondary antibody. The three-step detection protocol will incorporate a secondary antibody to bind to the primary antibody, succeeded by a linker antibody step to enhance binding efficacy. An enzyme-conjugated polymer is subsequently introduced to attach to the linkerantibody.Thepresenceofboundantibodiesisdemonstratedbyacolorimetric response.

SOURCE - Rabbit monoclonal

SPECIES REACTIVITY - Human, mouse, rat, dog and sheep

CLONE - BC15

ISOTYPE - IgG

PROTEIN CONCENTRATION - Call for lot specific Ig concentration.

EPITOPE/ANTIGEN - Napsin A

CELLULAR LOCALISATION - Cytoplasmic and nuclear staining (dot-like)

POSITIVE TISSUE CONTROL - Lung adenocarcinoma

KNOWN APPLICATIONS - Immunohistochemistry
30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

SUPPLIED AS - Buffer with protein carrier and preservative

STORAGE AND STABILITY -

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

Materials required but not provided -

1) Positive tissue control - Lung adenocarcinoma
2) Negativecontroltissue(internalorexternal)
3) Microscopeslidesandcoverslips
4) Stainingjarsorbaths
5) Timer
6) Xyleneorxylenesubstitute

7) Ethanolorreagentalcohol
8) Deionizedordistilledwater
9) Heatingequipmentorenzymefortissuepretreatmentstep
10)Detection system
11)Chromogen
12)Wash buffer
13) Hematoxylin
14)Antibody diluents
15)Peroxide block
16)Light microscope
17)Mounting medium

LIMITATIONS-

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.