

#### **ORDERING INFORMATION**

Catalog Number: MAB5429

Clone: 585302

Lot Number: CDJN01

Size: 100 μg

Formulation: 0.2 µm filtered solution in PBS

with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human Serpin A9

Immunogen: NS0-derived rhSerpin A9

Ig class: mouse IgG<sub>2A</sub>

Recommended Application: Immunohistochemistry

Other Application: Direct ELISA

# Monoclonal Anti-human Serpin A9/Centerin Antibody

### Background

Serpin A9 (<u>Ser</u>ine proteinase <u>in</u>hibitor-clade <u>A #9</u>; also GCET1, Centerin and Serpin A11) is a 46 kDa, secreted member of the  $\alpha$ 1-antitrypsin (clade A)-subfamily, serpin superfamily of protease inhibitors. It is only produced by normal and lymphoma germinal center B cells. Its function is unknown, but it presumably acts as an inhibitor of a trypsin-like protease. Mature human Serpin A9 contains one SERPIN motif (aa 405 - 415). There are multiple splice variants associated with Serpin A9. There are alternate start sites at Met19, Met99 and Met150. A fourth isoform shows a two aa substitution for aa 369 - 435, while a fifth isoform shares this same substitution coupled with a 39 aa substitution for aa 1 - 75. A sixth variant shows a deletion of aa 91 - 190. Mature human Serpin A9 shares 67% aa identity with mouse Serpin A9.

## Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human SerpinA9 (rhSerpin A9; aa 24 - 417; Accession # NP\_783866). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

#### **Formulation**

Lyophilized from a 0.2  $\mu m$  filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

#### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500  $\mu g/mL$ .

#### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. Avoid repeated freeze-thaw cvcles.

## **Specificity**

This antibody detects rhSerpin A9 in direct ELISAs. In this format, this antibody shows no cross-reactivity with rhSerpin A1, 3, 4, 5, 6, 11, 12, B6, 8, 9, C1, D1, E1, 2, F1, 2, G1, I1, 2, rmSerpinA3N or rmSerpinA9.

# Applications

Immunohistochemistry - This antibody was used at a concentration of 25  $\mu$ g/mL with appropriate secondary reagents to detect Serpin A9 in paraffin-embedded human B cell lymphoma. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

**Direct ELISA -** This antibody can be used at  $0.5 - 1.0 \,\mu\text{g/mL}$  with the appropriate secondary reagents to detect human Serpin A9. The detection limit for rhSerpin A9 is approximately 1 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

For immunohistochemistry images, please refer to our website at http://www.RnDSystems.com/go/ihc.