

# Biotinylated Anti-human Serpin A12 Antibody

#### **ORDERING INFORMATION**

Catalog Number: BAF4410

Lot Number: ZYG01

Size: 50 μg

Formulation: 0.2 µm filtered solution in PBS

with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human Serpin A12

Immunogen: NS0-derived rhSerpin A12

Ig Type: sheep IgG

Application: Western blot

## **Background**

Serpin A12 (<u>ser</u>ine <u>proteinase inhibitor-clade A#12</u>; also vaspin) is a 45 - 50 kDa, secreted member of the  $\alpha$ 1-antitrypsin (clade A)-subfamily, Serpin superfamily of protease inhibitors. It is produced by visceral adipocytes, and adipocyte-derived stem cells during obesity or diabetes. The presence of vaspin reverses insulin-resistance. Its molecular target is unknown. Human Serpin A12 is 414 amino acids (aa) in length. It contains a 20 aa signal sequence and a 394 aa mature region. A potential "active" inhibitor site lies between Arg363 and Met378. Mature human Serpin A12 shares 61% aa identity with mouse Serpin A12.

## Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human Serpin A12 (rhSerpin A12; aa 20 - 414; Accession # Q8IW75). Human Serpin A12 specific IgG was purified by human Serpin A12 affinity chromatography and then biotinylated.

### **Formulation**

Lyophilized from a 0.2  $\mu$ m filtered solution in phosphate-buffered saline (PBS) containing 50  $\mu$ g of bovine serum albumin (BSA) per 1  $\mu$ g of antibody.

### Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50  $\mu$ 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 cycles.

## **Specificity**

This antibody has been selected for use as a detection antibody in human Serpin A12 Western blots.

### Application

Western blot - This antibody can be used at 0.1 - 0.2  $\mu$ g/mL with the appropriate secondary reagents to detect human Serpin A12. The detection limit for rhSerpin A12 is approximately 5 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows less than 1% cross-reactivity with rhSerpin A1, rhSerpin A3, rhSerpin F1, and rmSerpin E1.

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