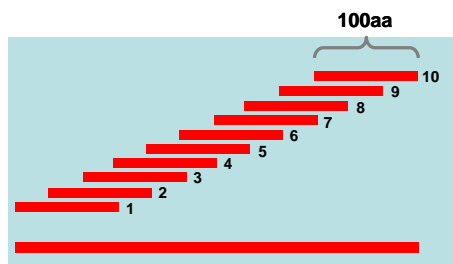
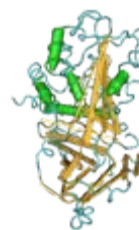




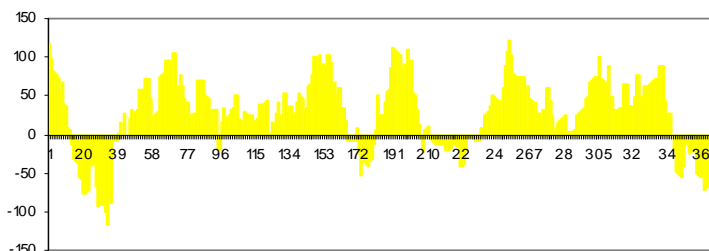
# Genomic Antibody Technology™ Application Note

## GENERATION OF A LIBRARY OF ANTIBODIES TARGETING 10 UNIQUE OVERLAPPING ALPHA-1 ANTITRYPSIN PROTEIN DOMAINS IN 76 DAYS

Alpha-1 Antitrypsin (AAT) is a 394aa monomeric, glycosylated protein found in serum. Scientists at Strategic Diagnostics designed 10 DNA antigen sequences within AAT by “walking” down the protein and using each of the sequences as a plasmid insert for SDI’s Genomic Antibody Technology™.

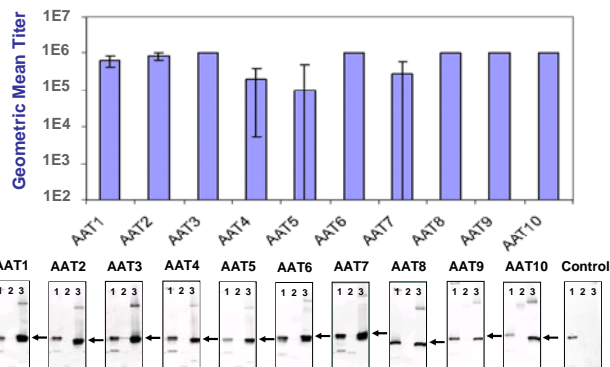
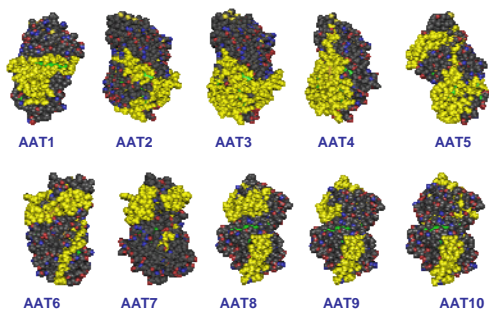


10 antigen sequences covering 394 aas



Antigenic analysis of 394 residues

The AAT sequence was systematically broken up into a series of 10 overlapping regions and each construct was immunized into a group of 3 mice using Genomic Antibody Technology™. The antisera were tested by western blot (recombinant protein fragment) and ELISA (native protein). Models of the selected domains are highlighted in yellow.



Western blot captured on digital camera. Antiserum diluted to 1:2500. Lane 1: Positive control, lane 2: negative control (E.coli extract), lane 3: test antigen. Contrast set at 4000.