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# SERPINA1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2238a

## Product Information

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| **Application** | WB, IHC, FC, ICC, E |
| **Primary Accession** | P01009 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 5D1D2 |
| **Isotype** | IgG1 |
| **Calculated MW** | 46737 |
| **Description** | The protein encoded by this gene is secreted and is a serine protease inhibitor whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. Defects in this gene can cause emphysema or liver disease. Several transcript variants encoding the same protein have been found for this gene. |
| **Immunogen** | Purified recombinant fragment of human SERPINA1 (AA: 23-237) expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide |

## Additional Information

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| **Gene ID** | 5265 |
| **Other Names** | Alpha-1-antitrypsin, Alpha-1 protease inhibitor, Alpha-1-antiproteinase, Serpin A1, Short peptide from AAT, SPAAT, SERPINA1, AAT, PI |
| **Dilution** | WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000 |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | SERPINA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | SERPINA1 ( HGNC:8941) |
| **Synonyms** | AAT, PI |

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| **Function** | Inhibitor of serine proteases. Its primary target is elastase, but it also has a moderate affinity for plasmin and thrombin. Irreversibly inhibits trypsin, chymotrypsin and plasminogen activator. The aberrant form inhibits insulin-induced NO synthesis in platelets, decreases coagulation time and has proteolytic activity against insulin and plasmin. |
| **Cellular Location** | Secreted. Endoplasmic reticulum. Note=The S and Z allele are not secreted effectively and accumulate intracellularly in the endoplasmic reticulum |
| **Tissue Location** | Ubiquitous. Expressed in leukocytes and plasma. |

## References

1.PLoS One. 2012;7(8):e42728. 2.Electrophoresis. 2012 Jul;33(14):2130-7.

## Images

