

## ARG81614 Human Serpin A5 ELISA Kit

Package: 96 wells Store at: 4°C

# Component

| Cat. No.     | Component Name                        | Package              | Temp   |
|--------------|---------------------------------------|----------------------|--|
| ARG81614-001 | Antibody-coated<br>microplate         | 8 X 12 strips        | 4°C. Unused strips<br>should be sealed<br>tightly in the air-tight<br>pouch. |
| ARG81614-002 | Standard                              | 2 X 10 ng/vial       | 4°C  |
| ARG81614-003 | Standard/Sample<br>diluent            | 30 ml (Ready to use) | 4°C  |
| ARG81614-004 | Antibody conjugate concentrate (100X) | 1 vial (100 µl)      | 4°C  |
| ARG81614-005 | Antibody diluent<br>buffer            | 12 ml (Ready to use) | 4°C  |
| ARG81614-006 | HRP-Streptavidin concentrate (100X)   | 1 vial (100 µl)      | 4°C  |
| ARG81614-007 | HRP-Streptavidin<br>diluent buffer    | 12 ml (Ready to use) | 4°C  |
| ARG81614-008 | 25X Wash buffer                       | 20 ml                | 4°C  |
| ARG81614-009 | TMB substrate                         | 10 ml (Ready to use) | 4°C (Protect from<br>light)  |
| ARG81614-010 | STOP solution                         | 10 ml (Ready to use) | 4°C  |
| ARG81614-011 | Plate sealer                          | 4 strips             | Room temperature   |

#### Summary

| Product Description | ARG81614 Human Serpin A5 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Serpin A5 in serum, plasma (heparin, EDTA), urine and cell culture supernatants. |
|---------------------|--|
| Tested Reactivity   | Hu   |
| Tested Application  | ELISA  |
| Specificity         | There is no detectable cross-reactivity with other relevant proteins.  |
| Target Name         | Serpin A5  |
| Conjugation         | HRP  |
| Conjugation Note    | Substrate: TMB and read at 450 nm.   |
| Sensitivity         | 78 pg/ml   |
| Sample Type         | Serum, plasma (heparin, EDTA), urine and cell culture supernatants.  |
| Standard Range      | 156 - 10000 pg/ml  |
| Sample Volume       | 100 µl   |

Alternate NamesProtein C inhibitor; PLANH3; Acrosomal serine protease inhibitor; PCI-B; Plasma serine protease<br/>inhibitor; Serpin A5; PCI; PROCI; PAI3; Plasminogen activator inhibitor 3; PAI-3

## **Application Instructions**

| Assay Time          | ~ 5 hours  |  |
|---------------------|--|--|
|                     |  |  |
| Properties          |  |  |
| Form                | 96 well  |  |
| Storage instruction | Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components. |  |
| Note                | For laboratory research only, not for drug, diagnostic or other use.   |  |

#### **Bioinformation**

| Gene Symbol    | SERPINA5   |
|----------------|--|
| Gene Full Name | serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 5  |
| Background     | The protein encoded by this gene is a member of the serpin family of proteins, a group of proteins that<br>inhibit serine proteases. This gene is one in a cluster of serpin genes located on the q arm of<br>chromosome 14. This family member is a glycoprotein that can inhibit several serine proteases,<br>including protein C and various plasminogen activators and kallikreins, and it thus plays diverse roles in<br>hemostasis and thrombosis in multiple organs. [provided by RefSeq, Aug 2012]   |
| Function       | Heparin-dependent serine protease inhibitor acting in body fluids and secretions. Inactivates serine proteases by binding irreversibly to their serine activation site. Involved in the regulation of intravascular and extravascular proteolytic activities. Plays hemostatic roles in the blood plasma. Acts as a procoagulant and proinflammatory factor by inhibiting the anticoagulant activated protein C factor as well as the generation of activated protein C factor by the thrombin/thrombomodulin complex. Acts as an anticoagulant factor by inhibiting blood coagulation factors like prothrombin, factor XI, factor Xa, plasma kallikrein and fibrinolytic enzymes such as tissue- and urinary-type plasminogen activators. In seminal plasma, inactivates several serine proteases implicated in the reproductive system. Inhibits the serpin acrosin; indirectly protects component of the male genital tract from being degraded by excessive released acrosin. Inhibits tissue-and urinary-type plasminogen activator, prostate-specific antigen and kallikrein activities; has a control on the sperm motility and fertilization. Inhibits the activated protein C-catalyzed degradation of SEMG1 and SEMG2; regulates the degradation of semenogelin during the process of transfer of spermatozoa from the male reproductive tract into the female tract. In urine, inhibits urinary-type plasminogen activator and kallikrein activities. Inactivates membrane-anchored serine proteases activities such as MPRSS7 and TMPRSS11E. Inhibits urinary-type plasminogen activator-dependent tumor cell invasion and metastasis. May also play a non-inhibitory role in seminal plasma and urine as a hydrophobic hormone carrier by its binding to retinoic acid. [UniProt] |
| Highlight      | Related products:<br><u>Serpin antibodies; Serpin ELISA Kits;</u><br>New ELISA data calculation tool:<br><u>Simplify the ELISA analysis by GainData</u>  |
| РТМ            | N- and O-glycosylated. N-glycosylation consists of a mixture of sialylated bi- (including sialyl-Lewis X epitopes), tri- and tetra-antennary complex-type chains; affects the maximal heparin- and thrombomodulin-enhanced rates of thrombin inhibition. O-glycosylated with core 1 or possibly core 8 glycans. Further modified with 2 sialic acid residues.  |
|                | Proteolytically cleaved. Inhibition of proteases is accompanied by formation of a stable enzyme-<br>inhibitor complex and by degradation of the serpin to lower molecular weight derivatives.  |

Proteolytically cleaved at the N-terminus; inhibits slightly the heparin- and thrombomodulin-enhanced rates of thrombin inhibition. [UniProt]

