

#### OriGene Technologies, Inc.

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# Product datasheet for TP325663

#### alpha 1 Antitrypsin (SERPINA1) (NM\_001127706) Human Recombinant Protein

### **Product data:**

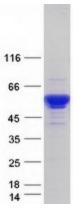
| Product Type:                            | Recombinant Proteins                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description:                             | Purified recombinant protein of Homo sapiens serpin peptidase inhibitor, clade A (alpha-1<br>antiproteinase, antitrypsin), member 1 (SERPINA1), transcript variant 10, 20 μg                                                                                                                                                                                                                                                                           |
| Species:                                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Expression Host:                         | HEK293T                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Expression cDNA Clone<br>or AA Sequence: | >RC225663 protein sequence<br>Red=Cloning site Green=Tags(s)                                                                                                                                                                                                                                                                                                                                                                                           |
|                                          | MPSSVSWGILLLAGLCCLVPVSLAEDPQGDAAQKTDTSHHDQDHPTFNKITPNLAEFAFSLYRQLAHQSN<br>STNIFFSPVSIATAFAMLSLGTKADTHDEILEGLNFNLTEIPEAQIHEGFQELLRTLNQPDSQLQLTTGN<br>GLFLSEGLKLVDKFLEDVKKLYHSEAFTVNFGDTEEAKKQINDYVEKGTQGKIVDLVKELDRDTVFALVN<br>YIFFKGKWERPFEVKDTEEEDFHVDQVTTVKVPMMKRLGMFNIQHCKKLSSWVLLMKYLGNATAIFFLPD<br>EGKLQHLENELTHDIITKFLENEDRRSASLHLPKLSITGTYDLKSVLGQLGITKVFSNGADLSGVTEEAP<br>LKLSKAVHKAVLTIDEKGTEAAGAMFLEAIPMSIPPEVKFNKPFVFLMIDQNTKSPLFMGKVVNPTQK |
|                                          | TRTRPLEQKLISEEDLAANDILDYKDDDDKV                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Tag:                                     | C-Myc/DDK                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Predicted MW:                            | 44.3 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Concentration:                           | >0.05 µg/µL as determined by microplate BCA method                                                                                                                                                                                                                                                                                                                                                                                                     |
| Purity:                                  | > 80% as determined by SDS-PAGE and Coomassie blue staining                                                                                                                                                                                                                                                                                                                                                                                            |
| Buffer:                                  | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol                                                                                                                                                                                                                                                                                                                                                                                                   |
| Preparation:                             | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.                                                                                                                                                                                                                                                                                                                                       |
| Note:                                    | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.                                                                                                                                                                                                                                                                                                   |
| Storage:                                 | Store at -80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Stability:                               | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                          |
| RefSeq:                                  | <u>NP 001121178</u>                                                                                                                                                                                                                                                                                                                                                                                                                                    |



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|                  | alpha 1 Antitrypsin (SERPINA1) (NM_001127706) Human Recombinant Protein – TP325663                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Locus ID:        | 5265                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| UniProt ID:      | <u>P01009</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| RefSeq Size:     | 3303                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Cytogenetics:    | 14q32.13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| RefSeq ORF:      | 1254                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Synonyms:        | A1A; A1AT; AAT; alpha1AT; nNIF; PI; PI1; PRO2275                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Summary:         | The protein encoded by this gene is a serine protease inhibitor belonging to the serpin<br>superfamily whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and<br>plasminogen activator. This protein is produced in the liver, the bone marrow, by lymphocytic<br>and monocytic cells in lymphoid tissue, and by the Paneth cells of the gut. Defects in this<br>gene are associated with chronic obstructive pulmonary disease, emphysema, and chronic<br>liver disease. Several transcript variants encoding the same protein have been found for this<br>gene. [provided by RefSeq, Aug 2020] |
| Protein Families | : Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Protein Pathway  | vs: Complement and coagulation cascades                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## **Product images:**



Coomassie blue staining of purified SERPINA1 protein (Cat# TP325663). The protein was produced from HEK293T cells transfected with SERPINA1 cDNA clone (Cat# [RC225663]) using MegaTran 2.0 (Cat# [TT210002]).

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