## Recombinant Human SerpinE2/SERPINE2 Protein (His Tag)

## Catalog Number: PKSH033671

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description         |          |             |   |
|---------------------|----------|-------------|---|
| Species             |          |             | Human   |
| Source              |          |             | HEK293 Cells-derived Human SerpinE2;SERPINE2 protein Ser20-Pro397, with an C-             |
|                     |          |             | terminal His  |
| Calculated MW       |          |             | 42.7 kDa  |
| Observed MW         |          |             | 50 kDa  |
| Accession           |          |             | P07093-2  |
| <b>Bio-activity</b> |          |             | Not validated for activity  |
| Properties          |          |             |   |
| Purity              |          |             | > 95 % as determined by reducing SDS-PAGE.  |
| Concentration       |          |             | Subject to label value.   |
| Endotoxin           |          |             | < 1.0 EU per µg of the protein as determined by the LAL method.                           |
| Storage             |          |             | Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.      |
| Shipping            |          |             | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel |
|                     |          |             | packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.                           |
| Formulation         |          |             | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.              |
| Data                |          |             |   |
|                     | kDa      | МК          | R   |
|                     | 120      |             |   |
|                     | 90<br>60 | -           |   |
|                     | 40       |             |   |
|                     | 20       |             |   |
|                     | 30       | ALC: NOT OF |   |

> 95 % as determined by reducing SDS-PAGE.

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## Background

Serpin E2 is a secreted protein that belongs to the serpin family. Serpin E2 is a serine protease inhibitor with activity toward thrombin, trypsin, and urokinase. Serpin E2 expression is weak or absent in all normal pancreas and chronic pancreatitis tissue. In contrast, it was strongly over-expressed in the majority of pancreatic carcinoma as well as gastric and colorectal cancer samples. Serpin E2 promotes neurite extension by inhibiting thrombin. It also can bind heparin. It has been shown that Serpin E2 is a novel target of ERK signaling involved in human colorectal tumorigenesis. It plays an important role in controlling male fertility because its knockout male mice show a marked impairment in fertility from the onset of sexual maturity and its abnormal expression is found in the semen of men with seminal dysfunction.