

## Recombinant Human SERPINB1/PI2 Protein (Human Cells, His Tag)

Catalog No. PKSH032695

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

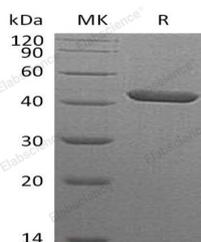
### Description

<b>Synonyms</b>	Leukocyte elastase inhibitor;SERPINB1;Monocyte/neutrophil elastase inhibitor;M/NEI;Peptidase inhibitor 2;PI-2;PI2;EI;ELANH2;HEL-S-27;HEL57;LEI;MNEI;
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Pro379
<b>Accession</b>	P30740
<b>Calculated Molecular Weight</b>	43.8 kDa
<b>Observed molecular weight</b>	40-56 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

SERPINB1 is a member of the serpin family and Ov-serpin subfamily. As protease inhibitors; serpins have an array of functions including regulating blood coagulation; fibrinolysis; the complement pathway; angiogenesis; inflammation; tumor suppression; extracellular matrix remodeling; and cell motility. SERPINB1 regulates the activity of the neutrophil proteases elastase; cathepsin G; proteinase-3; chymase; chymotrypsin; and kallikrein-3. Reactive bond 1 of SerpinB1 is specific for reaction with chymotrypsin-like protease such as cathepsin G; chymotrypsin or chymase. Reactive bond 2 of SerpinB1 is specific for reaction with elastase-like protease such as neutrophyl elastase; proteinase-3; pancreatic elastase or PSA. In addition; SERPINB1 also functions as a potent intracellular inhibitor of granzyme H.