

## Recombinant Mouse Prostatin/PRSS8 Protein (aa 30-289, His Tag)

**Catalog Number:** PKSM040855

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

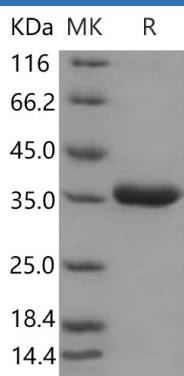
### Description

<b>Species</b>	Mouse
<b>Source</b>	Baculovirus-Insect Cells-derived Mouse Prostatin/PRSS8 protein Ala 30-Gln 289, with an C-terminal His
<b>Calculated MW</b>	29.3 kDa
<b>Observed MW</b>	35 kDa
<b>Accession</b>	EDL17608.1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 97 % 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 sterile 20mM Tris, 500mM 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



> 97 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

Prostasin (Prss8), also known as channel activating protease 1 (CAP1), is a trypsinlike serine peptidase, and plays important roles in epithelial physiology. It is originally purified as an active, soluble enzyme from human seminal fluid and is highly expressed in prostate, lung, kidney, salivary gland and pancreas. Prostasin is expressed as a glycosyl-phosphatidylinositol (GPI)-anchored membrane protein in prostate epithelial cells, and also exists as a secreted proteolytic enzyme possibly via tryptic cleavage of its COOH-terminal hydrophobic domain. Prostasin is found to activate the epithelial sodium channel (ENaC) which is tightly regulated and is critical for maintaining salt and fluid balance in the lung and kidney in both normal and pathological conditions. Accordingly, prostasin has been proposed as a target for therapeutic inhibition in cystic fibrosis. In addition, prostasin inhibits prostate and breast cancer cell invasion in vitro, suggesting a functional role as a suppressor of tumor invasion, as well as a regulator of gene expression during inflammation.