Recombinant Human SERPINB9/PI-9 Protein (Human Cells, His Tag)

Catalog Number: PKSH033318

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

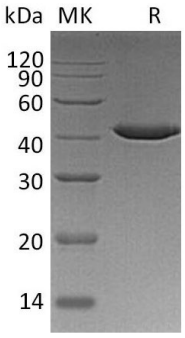
Description

Species	Human
Source	HEK293 Cells-derived Human SERPINB9/PI-9 protein Met 1-Pro376, with an C-terminal His
Calculated MW	43.4 kDa
Observed MW	35-40 kDa
Accession	P50453
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	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.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Serpin B9; also known as Cytoplasmic antiproteinase 3(CAP-3); is a cytoplasm protein which belongs to the large superfamily of serine proteinase inhibitors (serpins); which bind to and inactivate serine proteinases. Serpin B9 is an inhibitor of the granzyme B/perforin lytic pathway. It is expressed in normal mammary epithelial cells but not in most mammary carcinoma cell lines. These interactions are involved in many cellular processes; including coagulation; fibrinolysis; complement fixation; matrix remodeling; and apoptosis. Serpin-B9 expression in immune-privileged cells; APCs; and CTLs protects these cells against the actions of granzyme B; and when expressed in tumor cells or virally infected hepatocytes; confers resistance to killing by CTL and NK cells. Expression of increasing levels of Serpin-B9 in target cells may progressively inhibit immune surveillance by blocking NK and CTL-induced cytotoxicity through the perforin / granzyme pathway and then through the Fas / FasL pathway.