



Recombinant Protein Technical Manual
Recombinant Mouse SerpinB3/SCCA1 Protein (His
Tag)
RPES0714

Product Data:

Product SKU: RPES0714

Size: 20µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: NP_958751.2

Protein Information:

Molecular Mass: 46.5 kDa

AP Molecular Mass: 46 & 95 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris 100mM NaCl, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 1110001H02Rik;1110013A16Rik;Scca2;Serpinb3c;Serpinb4

Immunogen Information:

Sequence: Met 1-Pro 386

Background:

Serpins are the largest and most diverse family of serine protease inhibitors which are involved in a number of fundamental biological processes such as blood coagulation, complement activation, fibrinolysis, angiogenesis, inflammation and tumor suppression and are expressed in a cell-specific manner. Serpins are a group of proteins with similar structures that were first identified as a set of proteins able to inhibit proteases. The acronym serpin was originally coined because many serpins inhibit chymotrypsin-like serine proteases (serine protease inhibitors). Over 1000 serpins have been identified. Mouse SerpinB3, also known as Squamous cell carcinoma antigen 1, SCCA, SERPINB3, SCCA and SCCA1, is a cytoplasm protein which belongs to the serpin family and Ov-serpin subfamily. SerpinB3 may act as a protease inhibitor to modulate the host immune response against tumor cells. Mouse SerpinB3a and SerpinB3b, but not Serpinb3c, are functional, inhibiting both serine and cysteine proteinases with different inhibitory profiles due to the difference of two amino acids in their reactive site loops. SerpinB3a is ubiquitously expressed in most tissues, whereas expression of SerpinB3b is limited to keratinocytes. SerpinB3a and SerpinB3b may play different roles by inhibiting intrinsic or extrinsic proteinases with different expression distributions and different inhibitory profiles.