# Mouse Serpinb3c Protein (His Tag)

Catalog Number: 50625-M08B



# **General Information**

### Gene Name Synonym:

1110001H02Rik; 1110013A16Rik; Scca2; Serpinb3c; Serpinb4

#### **Protein Construction:**

A DNA sequence encoding the mouse SERPINB3C (NP\_958751.2) (Met 1-Pro 386) was expressed, with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: Baculovirus-Insect Cells

**QC** Testing

Purity: > 95 % as determined by SDS-PAGE

**Endotoxin:** 

 $< 1.0 \; EU \; per \; \mu g$  of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}$ C

Predicted N terminal: Met 1

# **Molecular Mass:**

The recombinant mouse SERPINB3C consists of 397 amino acids and has a calculated molecular mass of 46.5 kDa. The apparent molecular mass of the protein is approximately 46 & 95 kDa in SDS-PAGE under reducing conditions, corresponding to the monomer and dimer.

#### Formulation:

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

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

# **Usage Guide**

### Storage:

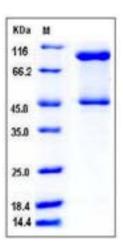
Store it under sterile conditions at  $-20\,^{\circ}\mathrm{C}$  to  $-80\,^{\circ}\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

# Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **Protein Description**

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-1, SERPINB3, SCCA and SCCA1, is a cytoplasm protein which belongs to theserpin 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.

#### References

1.Sakata, Y. et al., 2004, Biochem Biophys Res Commun. 324 (4):1340-5. 2. Horvath, AJ. et al., 2004, J. Mol. Evol. 59: 488-97. 3. Steenbakkers PJ. et al., 2008, Mycol. Res. 112 (Pt 8): 999-1006.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • http://www.sinobiological.com