Data Sheet (Cat.No.TMPY-01589)

TargetMol

Serpin B10 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	Serpinb10-ps;serpin peptidase inhibitor, clade B (ovalbumin), member 10;Serpin B10; 9830131G07;BB233602
Protein Construction:	A DNA sequence encoding the mouse SERPINB10 (Q8K1K6-1) (Met 1-Pro 397) was expressed, with a C-terminal polyhistidine tag. Predicted N terminal: Met
Species:	Mouse
Expression Host:	Baculovirus Insect Cells
Accession:	Q8K1K6-1
Molecular Weight:	46.5 kDa (predicted); 44 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 94 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 50 mM Tris, 100 mM NaCl, pH 8.0.Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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 1 serpins have been identified.Mouse SerpinB1, also known as Peptidase inhibitor 1, PI-1, Bomapin and SERPINB1, is a nucleus and cytoplasm protein that belongs to the serpin family and Ov-serpin subfamily. SerpinB1 is expressed specifically in the bone marrow. SerpinB1 is a protease inhibitor that may play a role in the regulation of protease activities during hematopoiesis and apoptosis induced by TNF. SerpinB1 is a redox-sensitive nuclear serpin that augments proliferation or apoptosis of leukaemia cells, depending on growth factors availability. SerpinB1 may regulate protease activities in the cytoplasm and the nucleus.

Reference

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