

Serpine B8 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	CAP-2;serpin peptidase inhibitor, clade B (ovalbumin), member 8;ovalbumin;NK10;CAP2; Spi8
Protein Construction:	A DNA sequence encoding the mouse SERPINB8 (NP_035589.1) (Met 1-Pro 374) was expressed,with a C-terminal polyhistidine tag. Predicted N terminal: Ala 24
Species:	Mouse
Expression Host:	Baculovirus Insect Cells
Accession:	O08800
Molecular Weight:	43.6 kDa (predicted); 43.6 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. Mouse SerpinB8, also known as Cytoplasmic antiproteinase 2, Peptidase inhibitor 8, SerpinB8, PI-8, SERPINB8 and CAP2, is a member of the Serpin

superfamily. SERPINB8 was broadly expressed. In normal neuroendocrine tissues, strongest SerpinB8 expression was detected in islets of Langerhans of the pancreas. Moderate SerpinB8 expression was observed in neuroendocrine cells of the thyroid, adrenal cortex, colon, and pituitary gland. In the pancreas, SerpinB8 is specifically expressed by insulin-producing beta cells, and can be used as an additional diagnostic immunohistochemical marker. Mouse SerpinB8 distribution alters during kidney regeneration, possibly to control a prohormone convertase involved in inflammation or tissue repair.

Reference

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Rawlings, N.D. et al., 2004, Biochem J. 378: 705-16.
Gillard, A. et al., 2006, Am J Nephrol. 26 (1): 34-42.
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