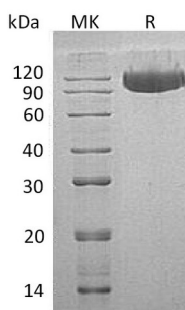


Summary

Name	Serpin G1
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ μ g as determined by LAL test.
Construction	Recombinant Human Serine Protease Inhibitor-clade G1 is produced by our Mammalian expression system and the target gene encoding Asn23-Ala500 is expressed with a 6His tag at the C-terminus.
Accession #	AAH11171.1
Host	Human Cells
Species	Human
Predicted Molecular Mass	53.9 KDa
Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at \leq -70°C, stable for 6 months after receipt. Store at \leq -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Background

Product Name: Recombinant Human Serpin G1 (C-6His)
Catalog #: PHH1517



Alternative Names

Plasma Protease C1 Inhibitor; C1 Inh; C1Inh; C1 Esterase Inhibitor; C1-Inhibiting Factor; Serpin G1; SERPING1; C1IN; C1NH

Background

As protease inhibitors, serpins have an array of functions including regulating blood clotting, the complement pathway, extracellular matrix remodeling, and cell motility. Serpin G1 is a serine protease inhibitor protein. It is the largest member among the serpin class of proteins. Remarkably, Serpin G1 has a 2-domain structure, unlike most family members. The C-terminal serpin domain is similar to other serpins, and this part of Serpin G1 provides the inhibitory activity. The N-terminal domain is not essential for Serpin G1 to inhibit proteinases and has no similarity to other proteins. The main function of Serpin G1 is the inhibition of the complement system to prevent spontaneous activation. Serpin G1 is an acute phase protein and circulates in blood at levels of around 0.25g/L, whose levels rise 2-fold during inflammation. Although named after its complement inhibitory activity, Serpin G1 also inhibits proteinases of the fibrinolytic, clotting, and kinin pathways. Most notably, Serpin G1 play a potentially crucial role in regulating important physiological pathways including complement activation, blood coagulation, fibrinolysis and the generation of kinins. It is also the most important physiological inhibitor of fXIIa, chymotrypsin and plasma kallikrein.

Note

For Research Use Only , Not for Diagnostic Use.