



Recombinant Protein Technical Manual  
Recombinant Mouse Serpin G1/C1IN Protein (His  
Tag)  
RPES2934

Product Data:

**Product SKU:** RPES2934

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P97290

Protein Information:

**Molecular Mass:** 54.6 kDa

**AP Molecular Mass:** 90 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl,pH8.0.

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

**Application:**

**Synonyms:** SERPIN G1;Plasma protease C1 inhibitor;C1 Inh;C1 esterase inhibitor;C1-inhibiting factor;Serping1;C1nh

## Immunogen Information:

**Sequence:** Ala20-Gly504

## Background:

SERPIN G1 is a member of the serpin family, The C-terminal serpin domain is similar to other serpins, and this part of C1-INH provides the inhibitory activity. SERPIN G1 is involved in the inhibition of the complement system to prevent spontaneous activation. SERPIN G1 may play a potentially crucial role in regulating important physiological pathways including complement activation, blood coagulation, fibrinolysis and the generation of kinins. SERPIN G1 prevents the proteolytic cleavage of later complement components C4 and C2 by C1 and MBL. SERPIN G1 is a very efficient physiological inhibitor of FXIIa, plasma kallikrein and fXIa, and could inhibit chymotrypsin and kallikrein. It forms a proteolytically inactive stoichiometric complex with the C1r or C1s proteases in the C1 complex of classical pathway of complement. Activation of the C1 complex is under control of the C1-inhibitor.