

Recombinant Human SerpinB9 Protein (His Tag)

Cat.NO.: TP07555

3th Edition

Synonyms:CAP-3;CAP3;PI-9;PI9

Description:SerpinB9, also known as Cytoplasmic antiproteinase 3, CAP-3, Peptidase inhibitor 9, SERPINB9 and PI-9, is a cytoplasm protein which belongs to the serpin family and Ov-serpin subfamily. Serpin-B9 (CAP-3 / PI-9) is the only known human intracellular inhibitor of granzyme B (GrB), the effector molecule in immunity against cytomegalovirus (CMV) and in renal allograft rejection. Serpin-B9 and SPI-6 expression in immune-privileged cells, APCs, and CTLs protects these cells against the actions of granzyme B, and when expressed in tumor cells or virally infected hepatocytes, confers resistance to killing by CTL and NK cells. Expression of increasing levels of Serpin-B9 (CAP-3 / PI-9) in target cells may progressively inhibit immune surveillance by blocking NK and CTL-induced cytotoxicity through the perforin / granzyme pathway and then through the Fas / FasL pathway. Serpin-B9 (CAP-3 / PI-9) is selectively up-regulated in hepatocytes in response to infiltration of the liver by NK cells that express perforin and enzymatically active granzyme B. Upregulated expression of Serpin-B9 (CAP-3 / PI-9) in NSCLC cells may serve to protect them from apoptosis induced by GrB.

Form:PBS

Molecular Weight:44.5 kDa

Sequences:Glu 2-Pro 376

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.