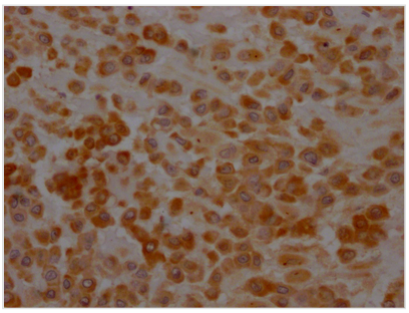
SERPINH1 Recombinant Monoclonal Antibody

Product Code	CSB-RA699016A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P50454
Immunogen	A synthesized peptide derived from human Hsp47
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Binds specifically to collagen. Could be involved as a chaperone in the biosynthetic pathway of collagen.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Signal transduction
Gene Names	SERPINH1
Clone No.	10B2

Image



IHC image of CSB-RA699016A0HU diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

A recombinant monoclonal antibody against SERPINH1 was prepared using a combination of protein technology and DNA recombinant technology. The process began with immunizing mice with a synthetic peptide derived from human Hsp47, followed by the extraction of total RNA from the spleen cells of the mice under aseptic conditions. The cDNA synthesized by RNA reverse transcription was then used as a template for PCR amplification of the

SERPINH1 antibody gene. The resulting SERPINH1 antibody gene was introduced into a vector and transfected into host cells for culture. The SERPINH1 recombinant monoclonal antibody was then purified from the supernatant of cell culture by affinity chromatography and rigorously verified for human SERPINH1 protein detection in ELISA and IHC experiments.

The SERPINH1 protein is a heat shock protein that functions as a chaperone protein, assisting in the proper folding and stabilization of newly synthesized collagen molecules in the endoplasmic reticulum (ER). SERPINH1 has been shown to play a role in other cellular processes, such as cell adhesion and migration, as well as tumor progression and metastasis. It has also been implicated in various diseases, including osteogenesis imperfecta, where mutations in the gene encoding SERPINH1 can lead to defects in collagen synthesis and stability, resulting in brittle bones and other connective tissue abnormalities.