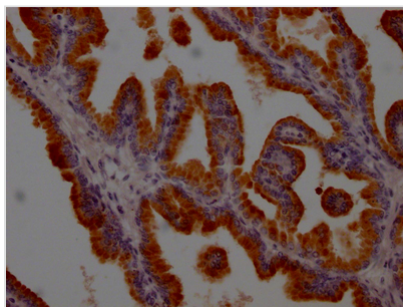




KLK3 Recombinant Monoclonal Antibody

Product Code	CSB-RA548583A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P07288
Immunogen	A synthesized peptide derived from human PSA/KLK3
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Hydrolyzes semenogelin-1 thus leading to the liquefaction of the seminal coagulum.
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	Neuroscience; Cancer; Tags & Cell Markers; Immunology; Signal transduction
Gene Names	KLK3
Clone No.	7D4

Image



IHC image of CSB-RA548583A0HU diluted at 1:100 and staining in paraffin-embedded human prostate 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

The KLK3 recombinant monoclonal antibody is prepared using protein and DNA recombinant technology. Initially, mice were immunized with a synthesized peptide from human KLK3. After a certain time, the spleen of mice was isolated under aseptic conditions, and the total RNA of spleen cells was extracted. The cDNA synthesized by RNA reverse transcription was used as a template for PCR amplification of the KLK3 antibody gene. The KLK3 antibody gene was



then introduced into a vector and transfected into host cells for culture. The KLK3 recombinant monoclonal antibody was purified from the supernatant of cell culture by affinity chromatography and can be used to detect human KLK3 protein in ELISA and IHC experiments.

The KLK3 protein, also known as the prostate-specific antigen (PSA), is a serine protease primarily produced by the prostate gland in men. Its main function is to cleave semenogelins, which are proteins that contribute to the gel-like texture of semen, allowing the semen to liquefy and release sperm for fertilization. In addition to its role in semen liquefaction, KLK3 has been implicated in other biological processes, including regulation of cell growth, apoptosis, and angiogenesis.