

Recombinant Human Prostate-Specific Antigen/Kallikrein-3

#R00494

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

The human tissue kallikrein (KLK) gene family contains 15 members that play important roles in cancer. Kallikrein-3, called prostate specific antigen (PSA), is a glycoprotein enzyme encoded in humans by the KLK3 gene. PSA is secreted by the epithelial cells of the prostate gland, hydrolyzes semenogelin-1 thus leading to the liquefaction of the seminal coagulum. PSA is an established tumor marker that aids in the diagnosis, staging, and follow up of prostate cancer.

AA Sequence

IVGGWECEKHSQPWQVLVASRGRAVCGGVLVHPQW
VLTAAH CIRNKS VILLGRHSLFHPEDTGQVFQVSHSF
PHPLYDMSLLKNRFLRPGDDSSHDLMLLRLLSEPAELT
DAVKVMDLPTQEPALGTTTCYASGWGSIEPEEFLTPKK
LQCVDLHVISNDVCAQVHPQKVTKFMLCAGRWTGG
KSTCSGDSGGPLVCNGVLQGITSWGSEPCALPERPS
LYTKVVHYRKWIKDTIVANP

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 26.1 kDa, a single non-glycosylated polypeptide chain containing 237 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Data not available.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20mM Tris-HCl, pH 8.0, 150mM NaCl, 3% trehalose.
Endotoxin	Less than 0.1 EU/µg of rHuPSA/Kallikrein-3 as determined by LAL method.