

Recombinant Staphylokinase

#R00503

Size: 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

Staphylokinase is an amino acid enzyme secreted by several species of streptococci. It is a 16kDa potent plasminogen activator that converts plasminogen into plasmin which can digest fibrin the major constituent of blood thrombi. SAK forms 1:1 complex with plasmin, which is a positive feedback of producing other complexes. Recent studies on the thrombolytic potential of recombinant SAK in achieving early perfusion in myocardial infarction and in the dissolution of platelet-rich clot have clearly established its immense utility in clinical medicine as a thrombolytic agent and suggested that it can be developed as a potent clot-dissolving agent.

AA Sequence

SSSFDKGGKYKKGDDASYFEPTGPYLMVNVTGVDGK
RNELLSPRYVEFPIKPGTTLTKEKIEYYVEWALDATAY
KEFRVVELDPSAKIEVTTYDKNKKKEETKSFPITEKGF

VVPDLSEHIKNPGFNLTQVVEKK

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 0.1-0.5 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

Synonyms	Sak42D
Source	Escherichia coli.
Molecular Weight	Approximately 15.6 kDa, a single non-glycosylated polypeptide chain containing 136 amino acids.
Purity	> 97% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The specific activity determined by fibrinolytic lysis in agarose plate is 5.0×10^4 IU/mg.
Physical Appearance	Sterile Filtered White Lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH7.0, 0.02 % Tween80.

Endotoxin	Less than 1 EU/μg of rSAK as determined by LAL method.
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