

PRODUCT INFORMATION

Fructosyl-lysine (trifluoroacetate salt)

Item No. 44082

Formal Name: N⁶-(1-deoxy-D-fructos-1-yl)-L-lysine, trifluoroacetate salt

Synonyms: εFru-Lys, N-ε-Fructosyl Lysine, Nε-(Fructosyl)-L-lysine, Nε-Fructosyl-lysine

MF: C₁₂H₂₄N₂O₇ • XCF₃COOH

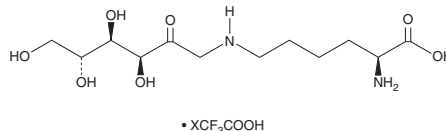
FW: 308.3

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Fructosyl-lysine (trifluoroacetate salt) is supplied as solid. A stock solution may be made by dissolving the fructosyl-lysine (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Fructosyl-lysine (trifluoroacetate salt) is slightly soluble (0.1-1 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of fructosyl-lysine (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. Fructosyl-lysine (trifluoroacetate salt) is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Fructosyl-lysine is an early-stage Amadori glycation product.^{1,2} Renal glomeruli, retina, sciatic nerve, and plasma protein levels of fructosyl-lysine are increased in streptozotocin-induced diabetic rats.¹

References

1. Karachalias, N., Babaei-Jadidi, R., Ahmed, N., *et al.* Accumulation of fructosyl-lysine and advanced glycation end products in the kidney, retina and peripheral nerve of streptozotocin-induced diabetic rats. *Biochem. Soc. Trans.* **31(Pt 6)**, 1423-1425 (2003).
2. Rabbani, N. and Thornalley, P.J. Hidden complexities in the measurement of fructosyl-lysine and advanced glycation end products for risk prediction of vascular complications of diabetes. *Diabetes* **64(1)**, 9-11 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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