Creative Enzymes®

protein-fructosamine 3-kinase

Cat. No. EXWM-3002

Lot. No. (See product label)

Introduction

Description	Non-enzymic glycation is an important factor in the pathogenesis of diabetic complications. Key early intermediates in this process are fructosamines, such as [protein]-N6-D-fructosyl-L-lysine. Fructosamine-3-kinase is part of an ATP-dependent system for removing carbohydrates from non-enzymically glycated proteins. The phosphorylation destablilizes the [protein]-N6-D-fructosyl-L-lysine adduct and leads to its spontaneous decomposition. cf. EC 2.7.1.172, protein-ribulosamine 3-kinase.
Synonyms	FN3K; fructosamine 3-kinase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.7.1.171
Reaction	ATP + [protein]-N6-D-fructosyl-L-lysine = ADP + [protein]-N6-(3-O-phospho-D-fructosyl)-L-lysine
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.