

## 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 destabilizes 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**  $\text{ATP} + [\text{protein}]\text{-N6-D-fructosyl-L-lysine} = \text{ADP} + [\text{protein}]\text{-N6-(3-O-phospho-D-fructosyl)-L-lysine}$

**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 °C for short term. For long term storage, store it at -20 °C~-80 °C.