

## N-acetylhexosamine 1-kinase

Cat. No. EXWM-2992

Lot. No. (See product label)

### Introduction

#### Description

This enzyme is involved in the lacto-N-biose I/galacto-N-biosedegradation pathway in the probiotic bacterium *Bifidobacterium longum*. Differs from EC 2.7.1.157, N-acetylgalactosamine kinase, as it can phosphorylate both N-acetylgalactosamine and N-acetylglucosamine at similar rates. Also has some activity with N-acetyl-D-mannosamine, D-talose and D-mannose as substrate. ATP can be replaced by GTP or ITP but with decreased enzyme activity. Requires a divalent cation, with Mg<sup>2+</sup> resulting in by far the greatest stimulation of enzyme activity.

#### Synonyms

NahK; LnpB; N-acetylgalactosamine/N-acetylglucosamine 1-kinase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.7.1.162

#### Reaction

ATP + N-acetyl-D-hexosamine = ADP + N-acetyl- $\alpha$ -D-hexosamine 1-phosphate

#### 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.