

L-fucokinase/GDP-fucose pyrophosphorylase from *Bacteroides fragilis*, Recombinant

Cat. No. NATE-1495

Lot. No. (See product label)

Introduction

Description

In enzymology, a fucokinase (EC 2.7.1.52) is an enzyme that catalyzes the chemical reaction: $\text{ATP} + \text{L-fucose} \rightarrow \text{ADP} + \text{beta-L-fucose 1-phosphate}$. Thus, the two substrates of this enzyme are ATP and L-fucose, whereas its two products are ADP and beta-L-fucose 1-phosphate. In enzymology, a fucose-1-phosphate guanylyltransferase (EC 2.7.7.30) is an enzyme that catalyzes the chemical reaction: $\text{GTP} + \text{beta-L-fucose 1-phosphate} \rightarrow \text{diphosphate} + \text{GDP-L-fucose}$. Thus, the two substrates of this enzyme are GTP and beta-L-fucose 1-phosphate, whereas its two products are diphosphate and GDP-L-fucose.

Synonyms

fucose kinase; L-fucose kinase; L-fucokinase; ATP:6-deoxy-L-galactose 1-phosphotransferase; ATP:L-fucose 1-phosphotransferase; fucokinase; EC 2.7.1.52; GDP fucose pyrophosphorylase; guanosine diphosphate L-fucose pyrophosphorylase; GDP-L-fucose pyrophosphorylase; GDP-fucose pyrophosphorylase; GTP:L-fucose-1-phosphate guanylyltransferase; fucose-1-phosphate guanylyltransferase; EC 2.7.7.30

Product Information

Species

Bacteroides fragilis

Source

E. coli

EC Number

EC 2.7.1.52/2.7.730

Molecular Weight

106 kDa

Purity

min 95% by SDS-PAGE

Unit Definition

One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol of Fuc-1-P from L-Fuc and ATP per minute at 37 °C.