

## ferric-chelate reductase (NADPH)

Cat. No. EXWM-1074

Lot. No. (See product label)

### Introduction

**Description** Contains FAD. The enzyme, which is widespread among bacteria, catalyses the reduction of ferric iron bound to a variety of iron chelators (siderophores), including ferric triscatecholates and ferric dicitrate, resulting in the release of ferrous iron. The enzyme from the bacterium *Escherichia coli* has the highest efficiency with the hydrolysed ferric enterobactin complex ferric N-(2,3-dihydroxybenzoyl)-L-serine. cf. EC 1.16.1.7, ferric-chelate reductase (NADH) and EC 1.16.1.10, ferric-chelate reductase [NAD(P)H].

**Synonyms** ferric chelate reductase (ambiguous); iron chelate reductase (ambiguous); NADPH:Fe<sup>3+</sup>-EDTA reductase; NADPH-dependent ferric reductase; yqjH (gene name); Fe(II):NADP<sup>+</sup> oxidoreductase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.16.1.9

**CAS No.** 120720-17-4

**Reaction** 2 Fe(II)-siderophore + NADP<sup>+</sup> + H<sup>+</sup> = 2 Fe(III)-siderophore + NADPH

**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.