

## thyroxine 5'-deiodinase

Cat. No. EXWM-1264

Lot. No. (See product label)

### Introduction

#### Description

The enzyme activity has only been demonstrated in the direction of 5'-deiodination, which renders the thyroid hormone more active. The enzyme consists of type I and type II enzymes, both containing selenocysteine, but with different kinetics. For the type I enzyme the first reaction is a reductive deiodination converting the -Se-H group of the enzyme into an -Se-I group; the reductant then reconverts this into -Se-H, releasing iodide.

#### Synonyms

diiodothyronine 5'-deiodinase [ambiguous]; iodothyronine 5'-deiodinase; iodothyronine outer ring monodeiodinase; type I iodothyronine deiodinase; type II iodothyronine deiodinase; thyroxine 5-deiodinase [misleading]; L-thyroxine iodohydrolase (reducing)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.21.99.4

#### CAS No.

70712-46-8

#### Reaction

3,3',5-triiodo-L-thyronine + iodide + acceptor + H<sup>+</sup> = L-thyroxine + reduced acceptor

#### 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.