

## succinylglutamate-semialdehyde dehydrogenase

Cat. No. EXWM-1173

Lot. No. (See product label)

### Introduction

#### Description

This is the fourth enzyme in the arginine succinyltransferase (AST) pathway for the catabolism of arginine. This pathway converts the carbon skeleton of arginine into glutamate, with the concomitant production of ammonia and conversion of succinyl-CoA into succinate and CoA. The five enzymes involved in this pathway are EC 2.3.1.109 (arginine N-succinyltransferase), EC 3.5.3.23 (N-succinylarginine dihydrolase), EC 2.6.1.11 (acetylornithine transaminase), EC 1.2.1.71 (succinylglutamate-semialdehyde dehydrogenase) and EC 3.5.1.96 (succinylglutamate desuccinylase).

#### Synonyms

succinylglutamic semialdehyde dehydrogenase; N-succinylglutamate 5-semialdehyde dehydrogenase; SGSD; AruD; AstD

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.2.1.71

#### Reaction

$\text{N-succinyl-L-glutamate 5-semialdehyde} + \text{NAD}^+ + \text{H}_2\text{O} = \text{N-succinyl-L-glutamate} + \text{NADH} + 2 \text{H}^+$

#### 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.