

NAD(P)H oxidase (H₂O₂-forming)

Cat. No. EXWM-1583

Lot. No. (See product label)

Introduction

Description

Requires FAD, heme and calcium. When calcium is present, this transmembrane glycoprotein generates H₂O₂ by transferring electrons from intracellular NAD(P)H to extracellular molecular oxygen. The electron bridge within the enzyme contains one molecule of FAD and probably two heme groups. This flavoprotein is expressed at the apical membrane of thyrocytes, and provides H₂O₂ for the thyroid peroxidase-catalysed biosynthesis of thyroid hormones.

Synonyms

THOX2; ThOX; dual oxidase; p138tox; thyroid NADPH oxidase; thyroid oxidase; thyroid oxidase 2; NADPH oxidase; NAD(P)H:oxygen oxidoreductase; NAD(P)H oxidase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.6.3.1

CAS No. 77106-92-4

Reaction $\text{NAD(P)H} + \text{H}^+ + \text{O}_2 = \text{NAD(P)}^+ + \text{H}_2\text{O}_2$

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.