# 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 transfering 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*** NAD(P)H + H+ + O2 = NAD(P)+ + H2O2

***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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.