

## vitamin D 25-hydroxylase

Cat. No. EXWM-0921

Lot. No. (See product label)

### Introduction

**Description** A microsomal enzyme isolated from human and mouse liver that bioactivates vitamin D3. While multiple isoforms (CYP27A1, CYP2J2/3, CYP3A4, CYP2D25 and CYP2C11) are able to catalyse the reaction in vitro, only CYP2R1 is thought to catalyse the reaction in humans in vivo. The direct electron donor to the enzyme is EC 1.6.2.4, NADPH-hemoprotein reductase.

**Synonyms** vitamin D2 25-hydroxylase; vitamin D3 25-hydroxylase; CYP2R1

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 1.14.14.24

**Reaction**  $\text{calcitriol} + \text{O}_2 + [\text{reduced NADPH-hemoprotein reductase}] = \text{calcidiol} + [\text{oxidized NADPH-hemoprotein reductase}] + \text{H}_2\text{O}$

**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.