

Cytochrome P450 Reductase from Human, Recombinant

Cat. No. NATE-1586

Lot. No. (See product label)

Introduction

Description

Cytochrome P450 reductase is a membrane bound enzyme required for electron transfer from NADP to cytochrome P450 in microsomes. It can also provide electron transfer to heme oxygenase and cytochrome B5. The cytochrome P450 enzyme system is mainly involved in the detoxification of xenobiotics in the liver. It also participates in the activation of procarcinogens and the metabolism of endogenous substrates such as steroids.

Applications

Human cytochrome P450 reductase has been used in a study to assess the biocatalytic synthesis and structure elucidation of cyclized metabolites of the deacetylase inhibitor panobinostat. Human cytochrome P450 reductase has also been used in a study to investigate the effects of coupled motions on electrons along the human microsomal P450 chains.

Synonyms

EC 1.6.2.4; NADPH:ferrihemoprotein oxidoreductase; NADPH:hemoprotein oxidoreductase; NADPH:P450 oxidoreductase; P450 reductase; CPR; 9039-06-9; FAD-cytochrome c reductase; NADPH-dependent cytochrome c reductase; NADPH:P-450 reductase

Product Information

Species

Human

Source

Baculovirus infected insect cells

Form

Supplied in a solution containing 10 mM potassium phosphate, pH 7.4, 0.1 mM EDTA, 0.5 mM DTT, 20% (v/v) glycerol

EC Number

EC 1.6.2.4

CAS No.

9023-03-4

Molecular Weight

76.5 kDa

Purity

>90% (SDS-PAGE)

Activity

>30 U/mg

Concentration

>1.0 mg/mL

Unit Definition

One unit will cause the reduction of 1.0 μ mole of cytochrome c by NADPH per minute at pH 7.4 at 37 °C.

Storage and Shipping Information

Storage

Store at -70°C