Creative Enzymes®

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 endogeneous 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 µmole of cytochrome c by NADPH per minute at pH 7.4 at 37 °C.

Storage and Shipping Information

Storage	Store at -70°C