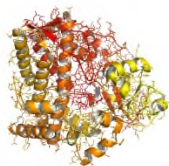


CYP450-GP



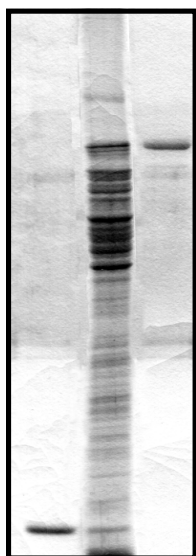
PRODUCT NUMBER Hu-P010
HUMAN LIVER CYTOCHROME B₅
Enzyme Purified from Human Liver Microsomes
LOT P6

B₅ CONTENT = **41.9 nmol/ml**
PROTEIN CONTENT = **1.1 mg/ml**
SPECIFIC CONTENT = **38.1 nmol/mg protein**

Cytochrome b₅ (b₅) was purified from liver microsomes from a single human subject using conventional techniques, including hydrophobic, anion-exchange, and hydroxylapatite adsorption chromatographies. Human b₅ is provided in 100 mM potassium phosphate buffer (pH 7.4), 0.1 mM EDTA, 0.1 mM DTT, and 20% glycerol.

◆ Purity

Purity has been determined by electrophoresis on 10% acrylamide gels run with the discontinuous buffer system. Human b₅ migrates as a single band with a molecular weight of 17.5 kDa (see Fig. 1, lane A). B₅ content is measured from the absolute oxidized spectrum using an extinction coefficient (E) of 117 mM⁻¹ cm⁻¹ at 413 nm.



SDS-PAGE analysis of purified human liver cytochrome b₅

Lane A, **cytochrome b₅** (0.5 µg);
Lane B, liver microsomes (10 µg);
Lane C, P450 Reductase (0.5 µg);

◆ Reconstitution

Addition of b₅ to a P450 reconstituted system (containing P450 enzyme, P450 reductase, and phospholipid) often results in metabolic properties (e.g., K_M) more closely resembling those of intact liver microsomes. This is especially true with CYP2E1, which seems to require b₅ for efficient catalytic function. Full details for b₅ reconstitution are given in the Protocols section of the CYP450-GP website.

◆ Storage

Cytochrome b₅ should be stored @ -80°C. Avoid repeated freeze-thawing cycles.

A B C