

# Human CYP1B1 + P450 Reductase SUPERSOMES™

Catalog Number.....456220  
Lot Number.....4148002

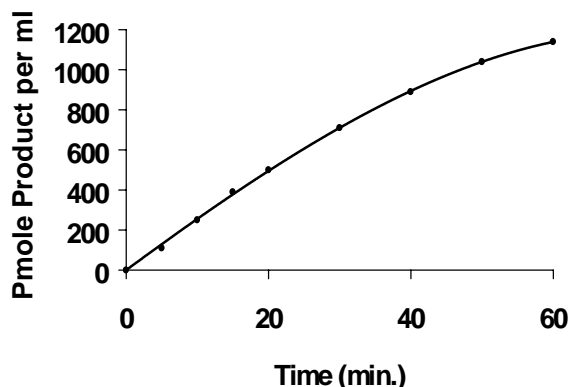
Storage Conditions..**STORE AT -80°C**  
Date Released .....2014 June  
Expiration Date.....2017 May

Package Contents.....0.5 nmole cytochrome P450 in 0.5 ml  
Protein Content.....16 mg/ml in 100mM potassium phosphate (pH 7.4)  
Cytochrome c Reductase Activity.....91 nmole/(min x mg protein)  
Cytochrome P450 Content.....1000 pmol per ml  
7-Ethoxyresorufin Deethylase Activity.....4 pmol product/(min x pmol P450)

This activity is catalyzed by CYP1B1 which is expressed from human CYP1B1 cDNA using a baculovirus expression system. Baculovirus infected insect cells (BTI-TN-5B1-4) were used to prepare these microsomes. A microsome preparation using wild type virus (Catalog No. 456201) should be used as a control for native activities.

**METHOD:** A two ml reaction mixture containing 10 pmole P450, 1.3mM NADP+, 3.3mM glucose-6-phosphate, 0.4 U/ml glucose-6-phosphate dehydrogenase, 3.3mM magnesium chloride and 1 µg/ml 7-ethoxyresorufin in 100mM potassium phosphate (pH 7.4) was incubated at 37°C. The fluorescence of the product was determined continuously with excitation at 550 nm and emission at 586 nm in a spectrofluorometer. The increase in fluorescence in the first 0.5 minute (linear portion of the curve) was quantitated by comparing to the fluorescence of a resorufin standard.

Time Course of Product Formation



## ADVICE

- Thaw rapidly in a 37°C water bath. Keep on ice until use
- Aliquot to minimize freeze-thawing cycles. Less than 20% of the catalytic activity is lost after 6 freeze thaw cycles.
- Metabolite production is linear with respect to enzyme concentration up to at least 50 pmol P450 per ml.
- Metabolite production with 7-ethoxyresorufin is approximately linear for 40 minutes (see graph above). Other substrates may not exhibit similar linearity with respect to incubation time.
- Western immunoblotting indicates the expressed CYP1B1 is a single protein band with the predicted mobility of CYP1B1 based on its cDNA sequence.

**For research use only. Not for use in diagnostic or therapeutic procedures.**

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## INSECT CELL MICROSOMES SAFETY INFORMATION

### HAZARD WARNING:

The product was produced using baculovirus (*Autographa californica*) infected insect cells (BTI-TN-5B1-4). This virus is not known to be pathogenic to humans or other mammals.

### SAFETY RECOMMENDATIONS:

When using this product, follow good laboratory safety procedures:

Do not eat, drink or smoke.

Avoid contact with skin or eyes.

Do not inhale aerosols.

Do not pipette by mouth.

Wear suitable protective clothing, gloves and eye protection.

Steam sterilize product or treat product with a 1% solution of sodium hypochlorite prior to disposal.

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