

Product Information

Microsomes from Liver, pooled from male rat (Sprague-Dawley)

Catalog Number **M9066**
Storage Temperature -70°C

Product Description

Liver microsomes are subcellular particles derived from the endoplasmic reticulum of hepatic cells. These microsomes are a rich source of drug metabolizing enzymes, including cytochromes P450. Microsome pools from various sources are useful in the study of xenobiotic metabolism and drug interactions.

This product contains a mixture of liver microsomes pooled from different male rats (Sprague Dawley) of 8 to 10 weeks of age.

The microsomes are in 250 mM sucrose. The following are reported on the lot specific C of A:

protein content
total cytochrome P450 concentration
cytochrome b₅ activity
oxidoreductase (cytochrome c reductase) activity
CYP3A (testosterone 6 β -hydroxylase) activity
CYP2C (testosterone 16 α -hydroxylase) activity
CYP1A (7-ethoxyresorufin O-deethylase) activity

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

1. Quickly thaw at 37°C using a water bath. Keep on ice until ready to use.
2. If not using the entire contents, aliquot to minimize freeze-thaw cycles.
3. Store aliquots at -70°C .

Storage/Stability

The product is shipped on dry ice and it is recommended to store the product at -70°C . The product, as supplied, remains active for at least 2 years if stored properly.

Product Profile

Total cytochrome P450 and cytochrome b₅ are assayed by the standard method of Omura and Sato.¹

Oxidoreductase Activity:

Determined as cytochrome c reductase activity.

CYP3A Isozyme Activity:

Determined as testosterone 6 β -hydroxylase activity.

CYP2C Isozyme Activity:

Determined as testosterone 16 α -hydroxylase activity.

CYP1A Isozyme Activity:

Determined as 7-ethoxyresorufin O-deethylase activity.

Reference

1. Omura, T., and Sato, R., J. Biol. Chem., **239**, 2379, (1964).

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