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 6β-hydroxylase) activity
- CYP2C (testosterone 16α-hydroxylase) activity
- CYP1A (7-ethoxyresorufin O-deethylase) activity

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.

Oxidoreductase Activity:
Determined as cytochrome c reductase activity.

CYP3A Isozyme Activity:
Determined as testosterone 6β-hydroxylase activity.

CYP2C Isozyme Activity:
Determined as testosterone 16α-hydroxylase activity.

CYP1A Isozyme Activity:
Determined as 7-ethoxyresorufin O-deethylase activity.

Reference

JX,EWK,MAM 03/18-1