Sigma-Aldrich 05904 Lab Kit
For the Evaluation of Fatty Acid Status in Blood (n-3 + n-6 PUFA)

Kit Contents

<table>
<thead>
<tr>
<th>Material</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Screw cap vials 10 mL with PTFE liners containing 1 mL 1.25 M MeOH/HCl each</td>
<td>17935-100X1ML</td>
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<tr>
<td>250 mL distilled water</td>
<td>95283-250ML</td>
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<tr>
<td>250 mL saturated KCl solution</td>
<td>60135-250ML</td>
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<tr>
<td>500 mL n-Hexane</td>
<td>52760-500ML</td>
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</table>

Description

The method provides useful information on the dietary habits of a given population and on the fatty acid (FA) profile of an individual. Dried blood samples obtained from collecting with the sampler kit are used for the evaluation of FA status in blood (n-3 + n-6 PUFA).

Use

1. Detach one rectangular sample dipstick from the blood collection area, perforated for easy removal from the device, with tweezers (for the double-test), and place each sample into a 10 mL screw cap vial containing 1 mL 1.25 M MeOH/HCl.
2. Maintain the vial in a dry bath at 70 °C for 60 minutes.
3. Bring the vial to room temperature and add 2 mL of distilled water and 2 mL of saturated HCl solution sequentially.
4. Mix and extract fatty acid methyl esters (FAME) using 2 mL n-hexane twice.
5. FAME are performed as duplicates by injecting approximately 80 μL of extract into a gas chromatograph, equipped with a 30 m capillary column (Omegawax® Capillary GC Column, Product No. Supelco 24152), PTV injector, FID, and a dedicated data system. Temperature programming goes from 170 to 205 °C at the same rate. Peaks are identified by the use of pure reference compounds.

Reference


Order Information

Lab Kit (Material No. 05904-1KT)

Precautions and Disclaimer

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