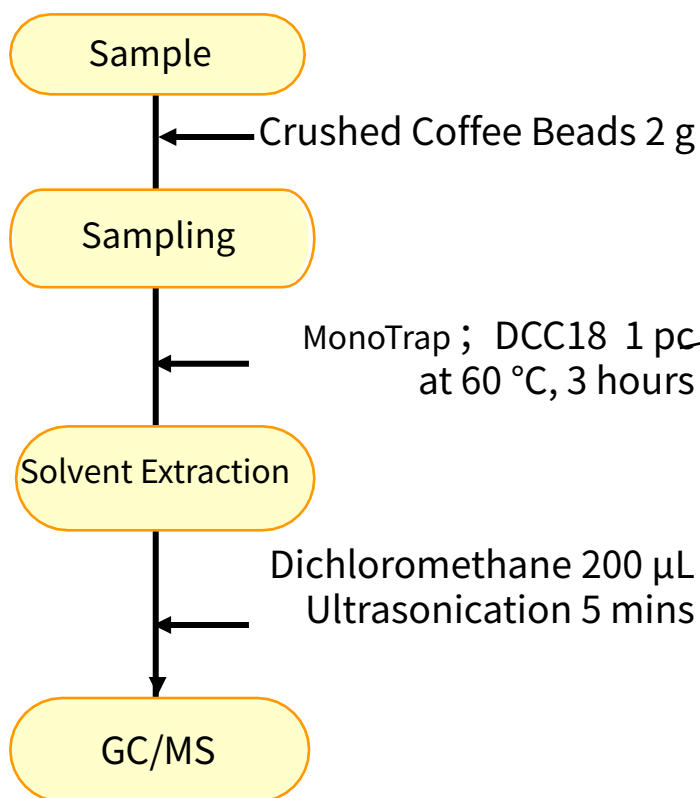


Easy Enrichment of Coffee Fragrance Compounds with MonoTrap

MonoTrap is a hybrid novel adsorbent that combines a large surface area and the properties of silica gel, activated carbon, and ODS. Utilizing the surface of porous silica, it can be used as a tool that makes use of the large surface area and the adsorbent effect caused by the inclusion of activated carbon for high collection efficiency and for short time and sensitive analysis. In this study, HS-simplified enrichment analyses of regular coffee flavor components were performed using MonoTrap DCC18 (with activated carbon). Sampling is possible only by placing it on coffee as shown in the bottom panel. The highly inert WAX-column InertCap Pure-WAX is the optimal column for fragrance components analyses. It is recommended to use this medicine in conjunction with MonoTrap.

Column : InertCap Pure-WAX (Cat.No. 1010-68142) 0.25 mm I.D. × 30 m df=0.25 μm

Protocol



GC Condition

System : SHIMADZU GC-2010, GCMS-QP2010 Plus

Column : InertCap Pure-WAX

0.25 mm I.D. × 30 m df=0.25 μm

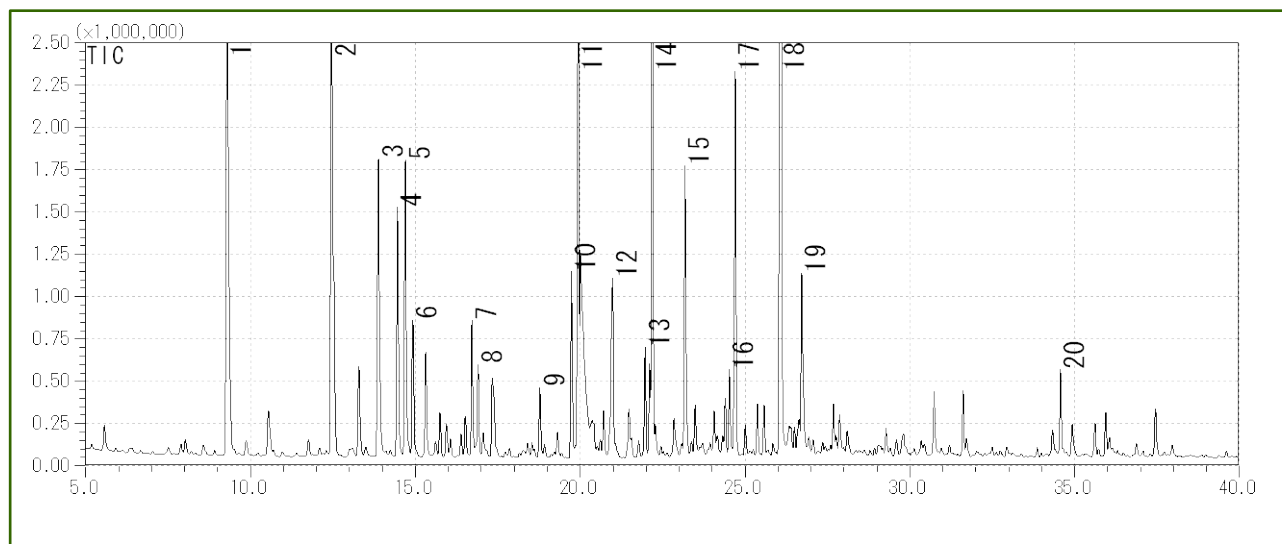
Column Temp: 40 °C (5 min) → 4 °C/min → 250 °C (5 min)

GC Capillary Column: **InertCap Pure-WAX** 0.25 mm I.D. × 30 m df=0.25 μm Cat.No.1010-68142

Carrier Gas : He 120 kPa

Injection : Splitless, 1 μL 250 °C

Detection : MS Scan (m/z ,30-350)



- | | | | |
|----|------------------------------|----|--------------------------|
| 1 | Pyridine | 11 | Acetol acetate |
| 2 | Methylpyrazine | 12 | Methyl 2-furyl ketone |
| 3 | Acetol | 13 | Vinyl propionate |
| 4 | 2,5-Dimethylpyrazine | 14 | Furfuryl acetate |
| 5 | 2,6-Dimethylpyrazine | 15 | 2-Formyl-5-methylfuran |
| 6 | 2-Ethylpyrazine | 16 | 2-Formyl-1-methylpyrrole |
| 7 | 2-Ethyl-6-methylpyrazine | 17 | Butyrolactone |
| 8 | 2-Ethyl-5-methylpyrazine | 18 | 2-Furanmethanol |
| 9 | 2-Ethyl-3,6-dimethylpyrazine | 19 | Isovaleric acid |
| 10 | Furfural | 20 | 2-Acetylpyrrole |

Ultra inert WAX column **InertCap Pure-WAX** is highly recommended to analyze aromatic compounds together with **MonoTrap**

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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