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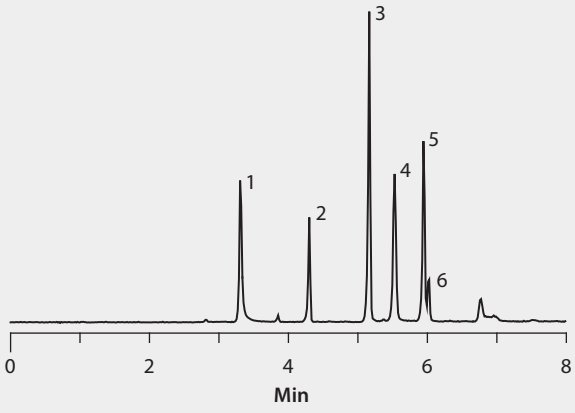
# LC/MS Analysis of Nicotine and Metabolites on Kromasil® Eternity™ C18 (Analyte Set 2)

Nicotine and metabolites are shown here separated on a Kromasil Eternity C18 column, Fluka LC-MS Ultra CHROMASOLV solvents were used to supply low background interference and low particulate contaminants for robust, trouble-free operation. Cerilliant CRMs provided reliable identification and quantification.

| | |
|---|---|
| market focus | Clinical |
| column | Kromasil Eternity C18, 10 cm x 3.0 mm I.D., 2.5 µm particles (K08971111) |
| mobile phase | [A] 10 mM ammonium acetate in water:methanol (95:5); [B] 10 mM ammonium acetate in water:methanol (10:90) |
| gradient | 0% B held for 1 min; to 100% B in 8.5 min;100% B held for 1 min |
| flow rate | 0.4 mL/min |
| pressure | 332 psi (23 bar) |
| column temp. | 45 °C |
| detector | MS, ESI(+) TOF, EIC |
| injection | 5 µL |
| sample | 100 ng/mL in mobile phase A |
| Application No. | G005925 |

1. Nornicotine
2. *trans*-3'-Hydroxycotinine
3. Cotinine
4. (±)-*N'*-Nitrosonornicotine (NNN)
5. 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) isomer 1
6. 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) isomer 2




**Related Products**

analytical column
Kromasil® Eternity™ C18 HPLC Column (Supelco K08971111)
mobile phase component
Ammonium acetate (Fluka 14267)
Methanol (Fluka 14262)
Water (Fluka 14263)
standard
(–)-Cotinine solution (Cerilliant C-016)
trans-3'-Hydroxycotinine solution (Cerilliant H-101)
(±)-N'-Nitrosonornicotine (NNN) solution (Cerilliant N-075)
4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) solution (Cerilliant N-076)
(±)-Nornicotine solution (Cerilliant N-071)