

# Technical Datasheet

**Analysis Name:** Tropane Alkaloids by LC-MS/MS

**Method Number:** LI-00.027

**Scope of Application:** Cereals and cereals-based products, oil, fruit/vegetable, milk. This method cannot be used to analyze any spices /seasoning /plant extract. (Use method LI-00.013 to obtain results on spices /seasoning /plant extract.)

**Description:** In-house method for the quantitative determination of two Tropane Alkaloids, namely atropine and scopolamine, in cereals and cereals-based products oil, fruit/vegetable, milk by liquid chromatography-tandem mass spectrometry (LC-MS/MS).

**Sample Weight Required:** Minimum 100 g

**Method Reference:** [1] Food Safety Brief on Tropane Alkaloids (2017)  
[2] "Foods of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS(/MS) following acetonitrile extraction/partitioning and clean-up by dispersive SPE – QuEChERS method". European Committee for Standardisation (CEN), EN 15662:2008 (2008).  
[3] SANTE/11813/2017. Guidance document on analytical quality control and method validation procedures for pesticide residues and analysis in food and feed (2017).

**Analytical Platform:** LC/MS/MS

| Analyte Reported | Alias                                          | Unit of Measure | Limit of Quantification | Reproducibility |
|------------------|------------------------------------------------|-----------------|-------------------------|-----------------|
| Atropine         | Mixture of (-)-hyoscyamine and (+)-hyoscyamine | µg/kg           | 0.5 (1 for oil)         | ≤20%            |
| Scopolamine      | (-)-scopolamine                                | µg/kg           | 0.5 (1 for oil)         | ≤20%            |