

Authenticity of Vanillin

New Agroisolab exclusive method for vanillin in complex food matrices

The stable isotope analysis is the most effective way to prove the authenticity of vanillin. The main concern so far has been the reprocessing of the sample and the purification process of the vanillin component from complex matrices. The conservative "Freiburger Methode" is time consuming, with a low vanillin yield and a low purification degree of the vanillin component. Hence, this method remains unsuitable for complex matrices as chocolate, typically containing small portions of vanillin.

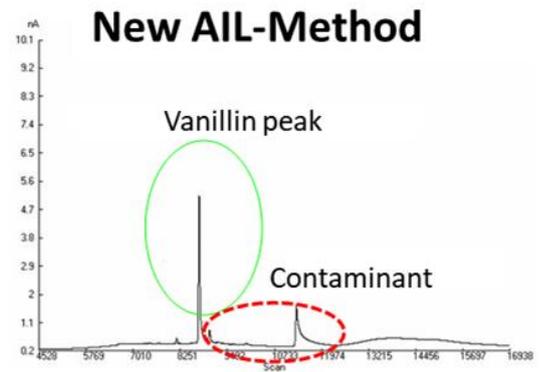
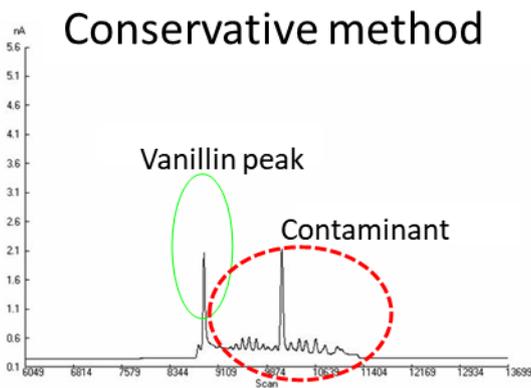
The new **Agroisolab Method (AIL)** overcomes all these obstacles and enables the purification process of vanillin out of complex food matrices.

The benefits of the AIL Method:

- Time efficient: Analysis within 48 hours possible!
- High vanillin yield in the matrix extract.
- High level of purity of the vanillin extract

For further information on vanillin authenticity and to discuss your questions please contact us.

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Our successful performance in an European wide proficiency test utilizing the new AIL method for the extraction of vanillin from complex matrices

→The ratio ¹³C/¹²C of vanillin is the data base for the evaluation of its authenticity

| Laboratory Code | Sample | Z-scores |
|-----------------|--------|----------|
| B1 | -19.49 | -2.08 |
| B2 | -19.00 | -1.20 |
| B8 | -19.00 | -1.20 |
| B3 | -18.72 | -0.70 |
| B4 | -18.44 | -0.20 |
| B9 | -18.10 | 0.41 |
| B7 | -17.64 | 1.23 |
| B6 | -17.34 | 1.76 |
| B5 | -17.22 | 1.98 |

