

Details of Analysis

Results are reported in per mil (‰), or the difference per thousand, versus Vienna-Pee Dee Belemnite (V-PDB), which has been established as the international zero point.

Honey Test - (Stable Carbon Isotope Ratio Analysis - SCIRA) measures the carbon-13 content of the whole honey, according to AOAC methods. The reference material used for honey analysis was IA-R024 (olive oil standard) with $\delta^{13}\text{C}_{\text{V-PDB}} = -29.27$ ‰. Our olive oil standard is traceable to NBS-22 (mineral oil), distributed by the IAEA, with an accepted $\delta^{13}\text{C}_{\text{V-PDB}} = -29.81$ ‰.

Protein Test - (Internal Standard Carbon Isotope Ratio Analysis - ISCIRA) measures the carbon-13 content of protein extracted from the honey according to AOAC methods. The reference material used for protein analysis was IAEA-CH-6 with an accepted $\delta^{13}\text{C}_{\text{V-PDB}} = -10.43$ ‰ which is distributed by the IAEA.

QA Procedures

The results are quality assured by simultaneous preparation of our own honey working standards. These and other check samples are analysed within the batch of samples. Results of these analyses are tabulated below the results for your own samples.

Interpretation of Results

The Honey $\delta^{13}\text{C}$ value minus the Protein $\delta^{13}\text{C}$ value should not be greater than + 1.0 ‰. In our considered opinion, a value greater than this will indicate the possibility of adulteration with syrups or sugars from C4 plants such as high fructose corn syrup or cane sugar.

Unless the return of samples is requested, they will be stored at Iso-Analytical for a minimum of 3 months before disposal.

If you require any further information regarding this analysis, please do not hesitate to contact us.

Reported By:

Checked By:

Tanith Allwood, BSc.

Steve Brookes, PhD.

Iso-Analytical Limited
Millbuck Way
Sandbach
Cheshire
CW11 3HT
UK

Tel.: +44 (0) 1270 766771
Fax.: +44 (0) 1270 766709
Email: info@iso-analytical.com
<http://www.iso-analytical.com>