International Calibration Standards

for HPLC Analysis of Isomerized & Reduced Isomerized α-Acids

Tetra, ICS-T3

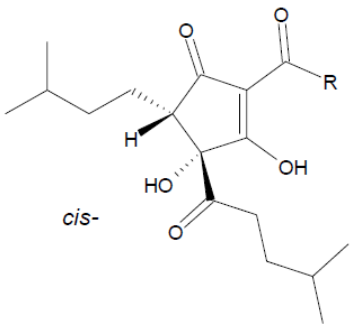
ICS-T3 is a purified preparation of tetrahydroiso-α-acids containing both cis- and trans- isomers.

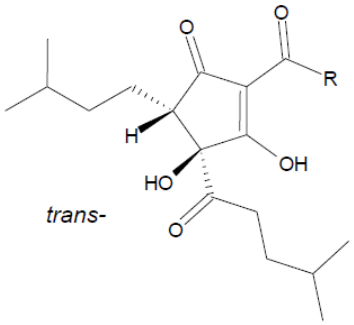
Total Iso-α-acids: 99.4 %(w/w)

Co ratio of ICS-T3: 0.347

The above figure was determined by the International Subcommittee for Isomerized Hop α-Acids Standards and takes into account **only** the major forms of the tetrahydroiso-α-acids that are present:
two isomers (cis & trans) each of the

- tetrahydroisocohumulones
- tetrahydroisohumulones
- tetrahydroisoadhumulones





Tetra ICS-T3

(contains both cis- & trans- forms of tetrahydroiso-alpha-acids)

If you are using the recommended method, expect the (combined) area of the tetrahydroisocohumulones peak(s) to be about 35% of the total peak area of all of the compounds included in the calibration. (Caution: This may not be the case for methods that use other mobile phases or for measurement at different wavelengths).

The following two chromatograms (of a single analysis) illustrate (page 2) the (usually) three major peaks upon which the calibration must be based and (page 3) the minor peaks that are also present in the preparation.

More highly resolving HPLC (or UPLC) columns using the recommended mobile phase, may separate some of the cis- and trans- forms of tetrahydroiso-alpha-acids.

Storage: -20 °C, gas-tight under CO_2 or N_2
Country of origin/produced: USA
Not for human consumption. Intended use is for industrial and analytical purposes.

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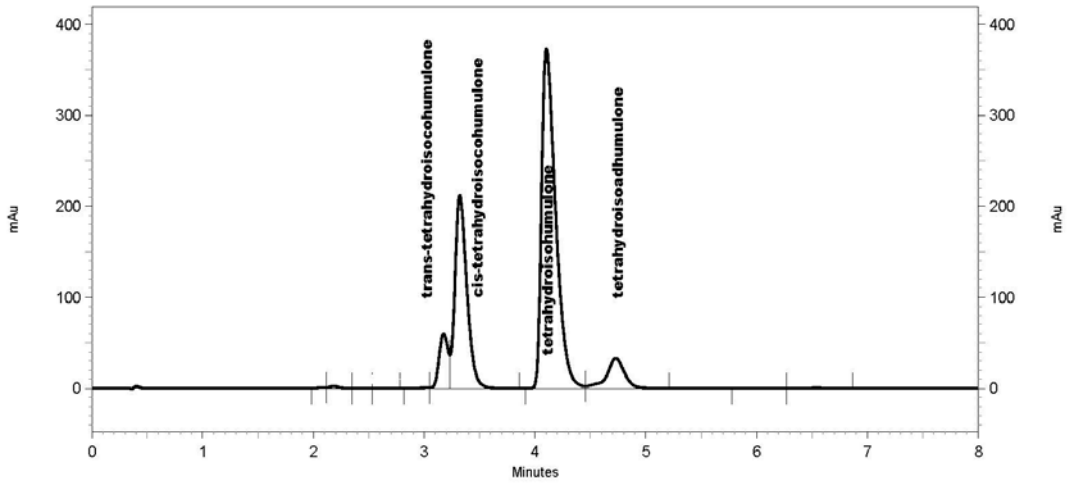
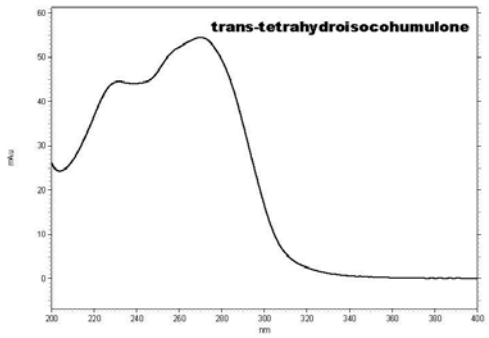
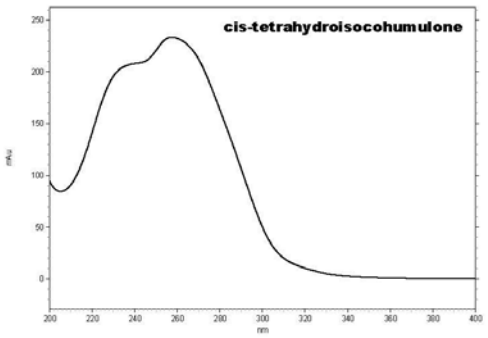
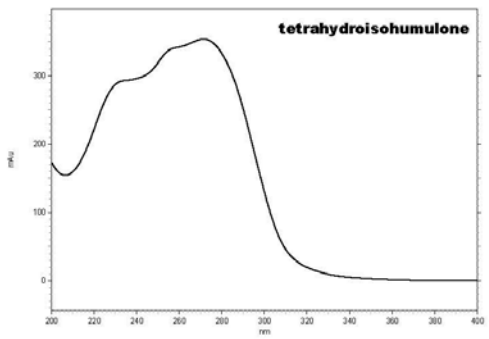
Tetra ICS-T3

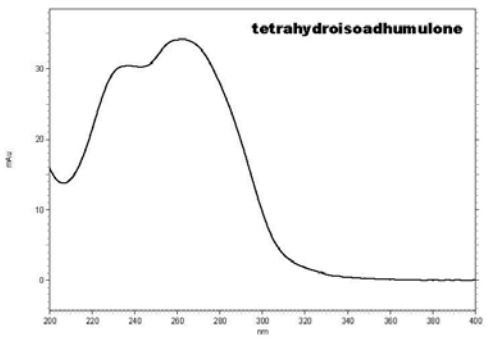
International Subcommittee for Isomerized Hop Alpha Acids Standards
Data acquired by: Bob Smith 2/16/12
Column: Phenomenex C18 at 270nm 50mm x 4.6mm x 2.6um at 40C
Mobile Phase: 730mL MeOH/ 280mL H2O/ 10mL H3PO4/ 1mL Na2EDTA











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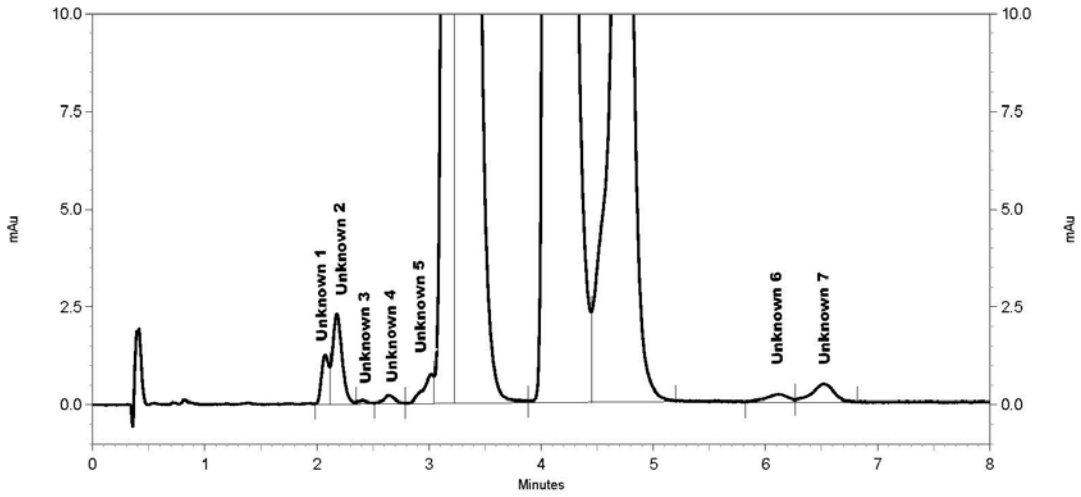

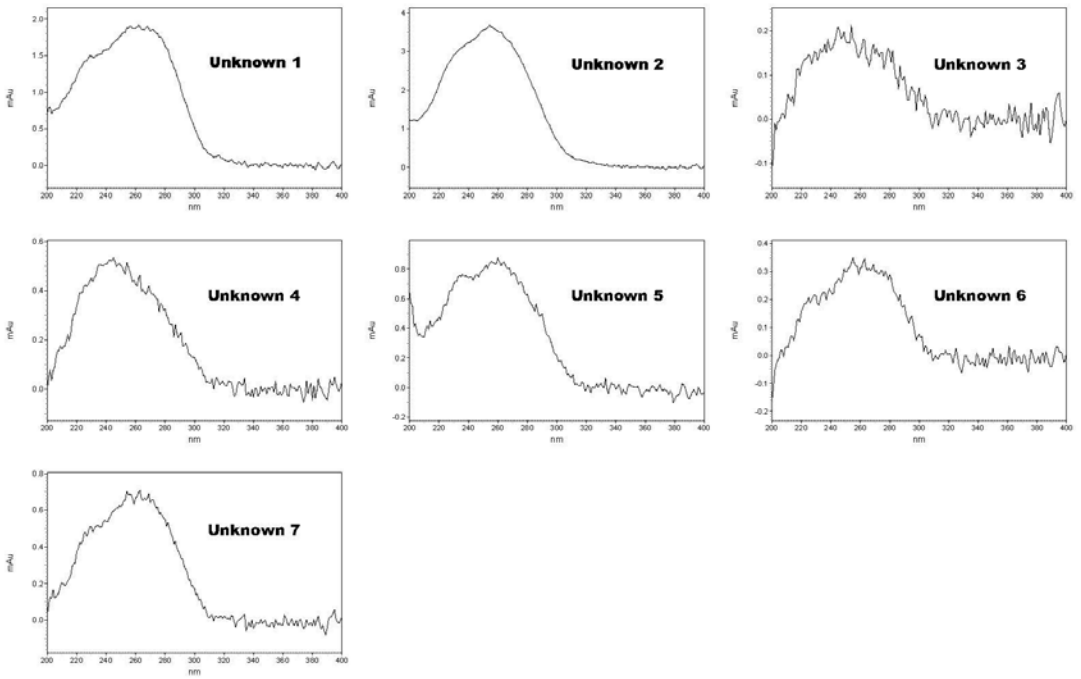

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