

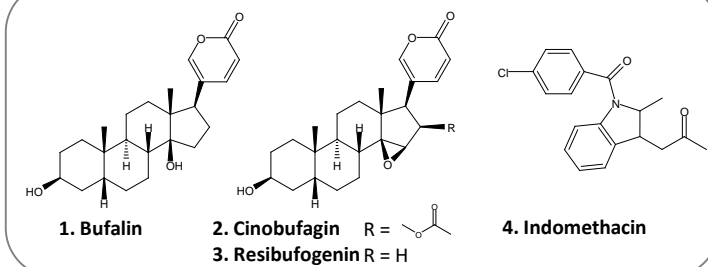
Analysis of Bufosteroids in Senso In Accordance with the Japanese Pharmacopoeia

Bufotoxin refers to crude drugs collected from the venomous glands of a toad (e.g., *Bufo bufo garagarizans* Cantor).

The Japanese Pharmacopoeia HPLC method to quantify bufo steroids in senso employs an ODS-column. The following system suitability items are specified.

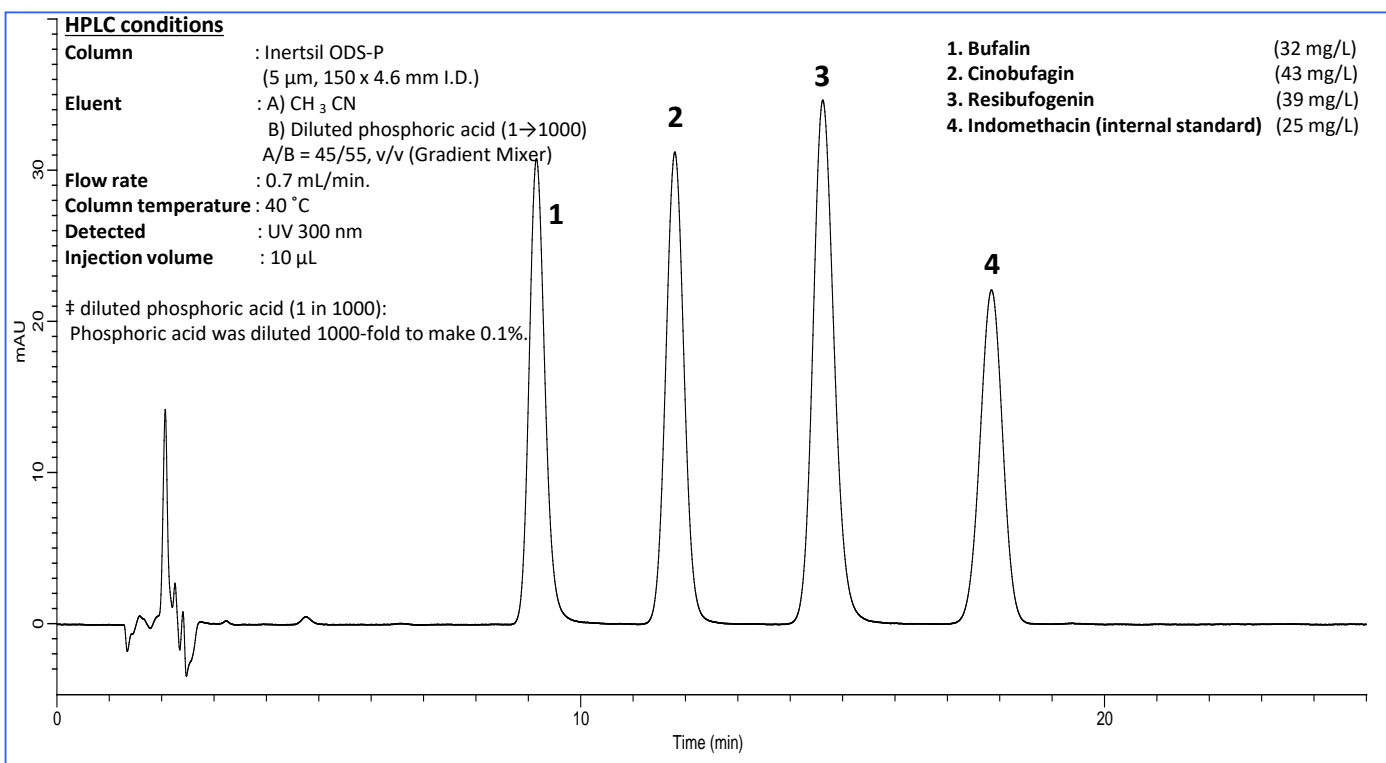
(T. Fukaya)

Structural formula



Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

Example: Measurement of standard



System suitability test

When analyzed under the above HPLC conditions,

- Bufalin, cinobufagin, resibufogenin and indomethacin (internal standard) are eluted in this order.
- Each peak is completely separated.

Our results

Elution order : Satisfy the provisions
Resolution : Peak 1 - 2 : 11.8
Peak 2 - 3 : 14.6
Peak 3 - 4 : 17.8



Complete separation

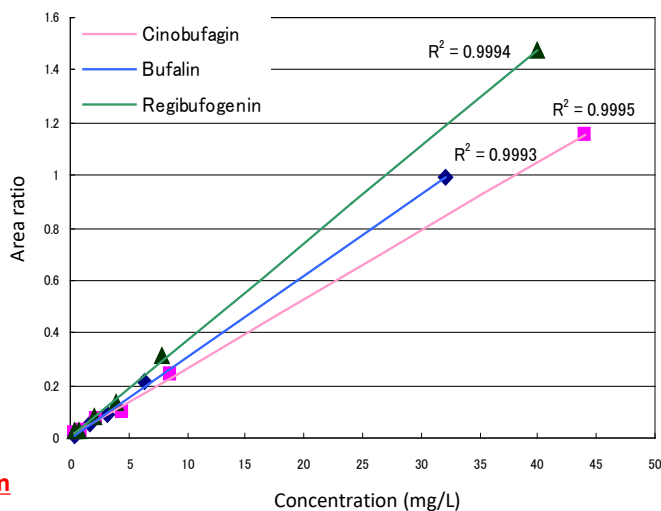
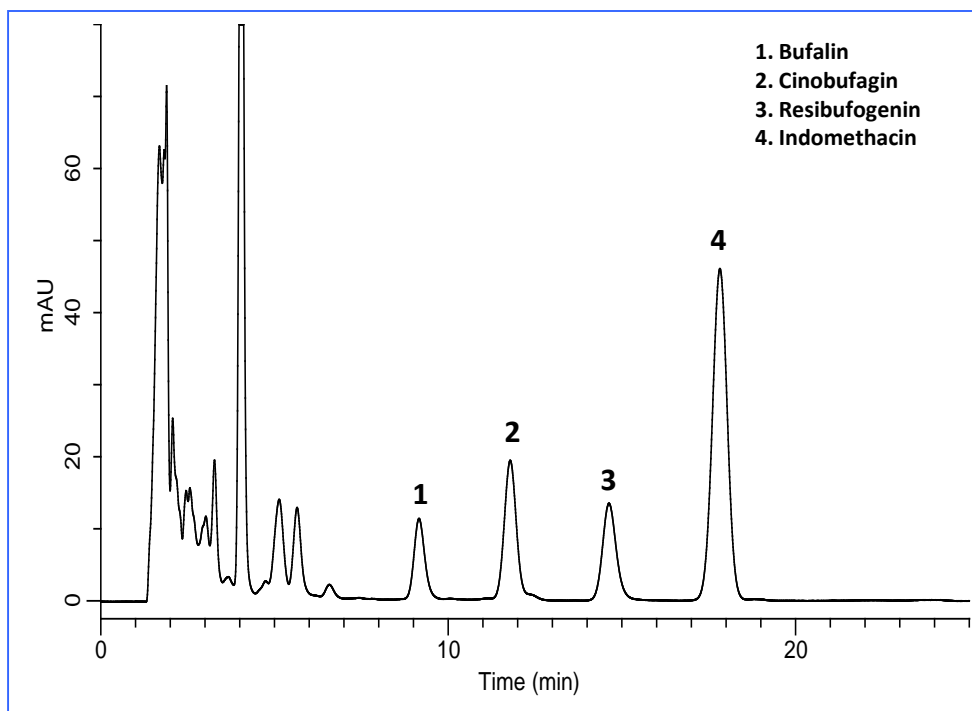
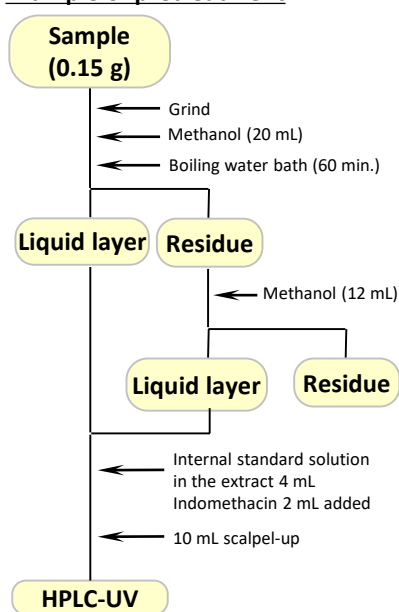


Figure 1: Calibration curve of bufosteroids.

*Refer to Technical Note No. 38 for the resolutions.

Analysis of Drugs Containing Commercially Available Bufotoxin

Example of pretreatment



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