

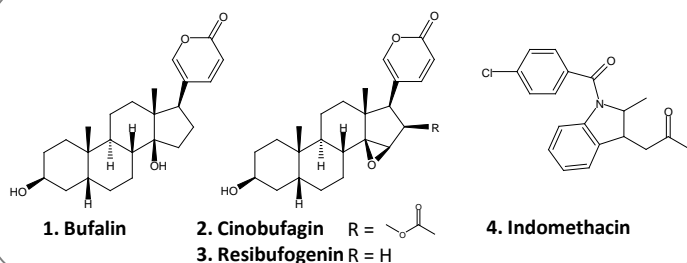
Analysis of Bufosteroids in Senso In Accordance with the Japanese Pharmacopoeia

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.

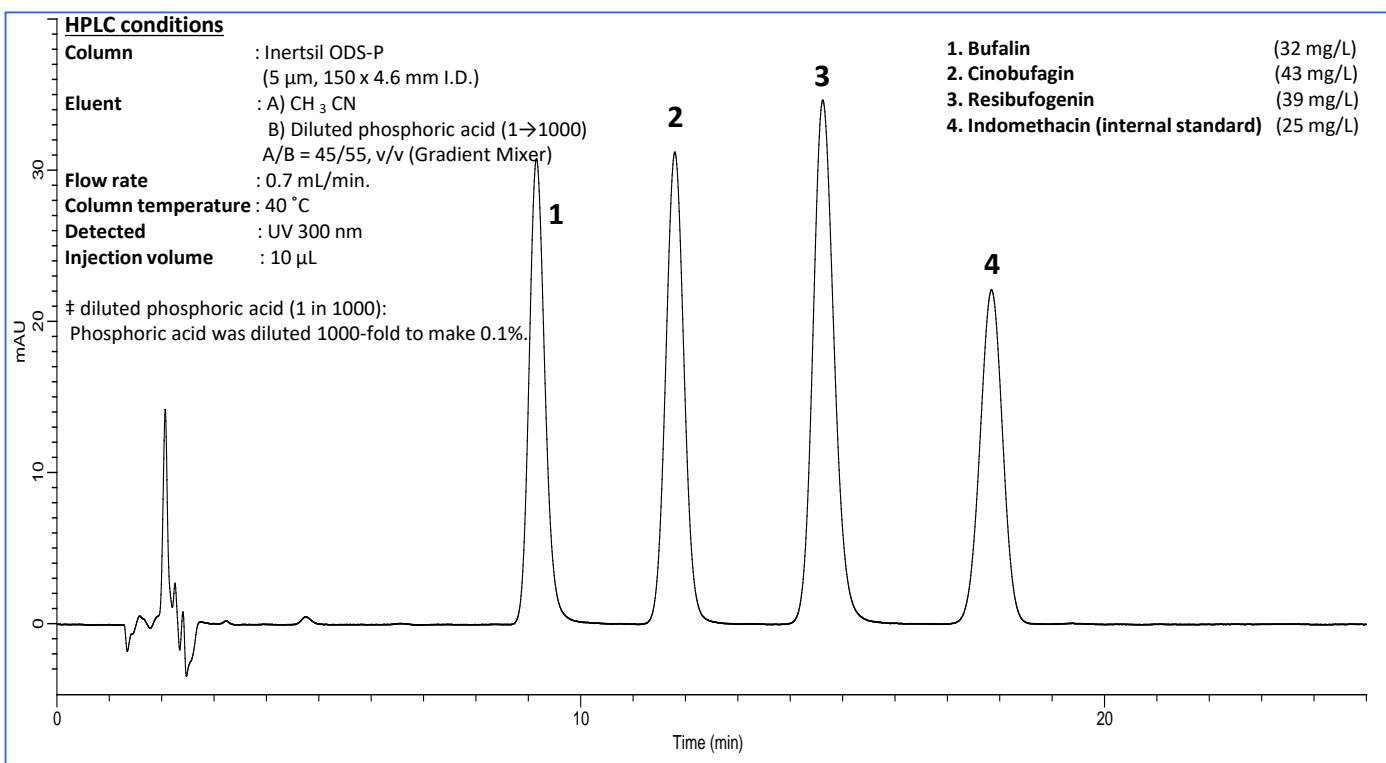
(T. Fukaya)

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,

1. Bufalin, cinobufagin, resibufogenin and indomethacin (internal standard) are eluted in this order.
2. 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

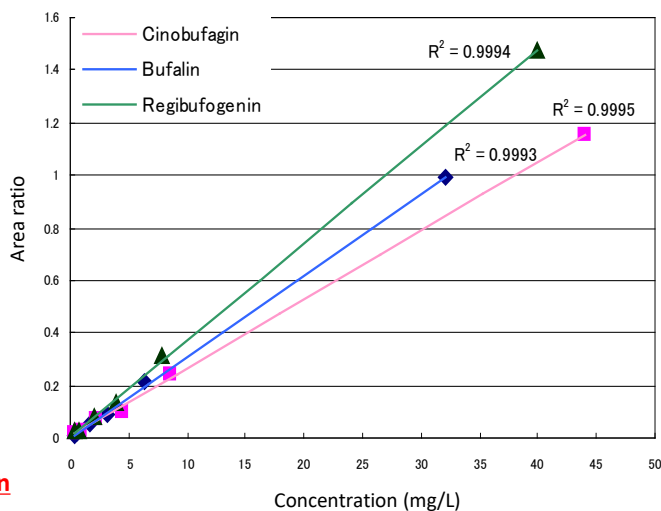
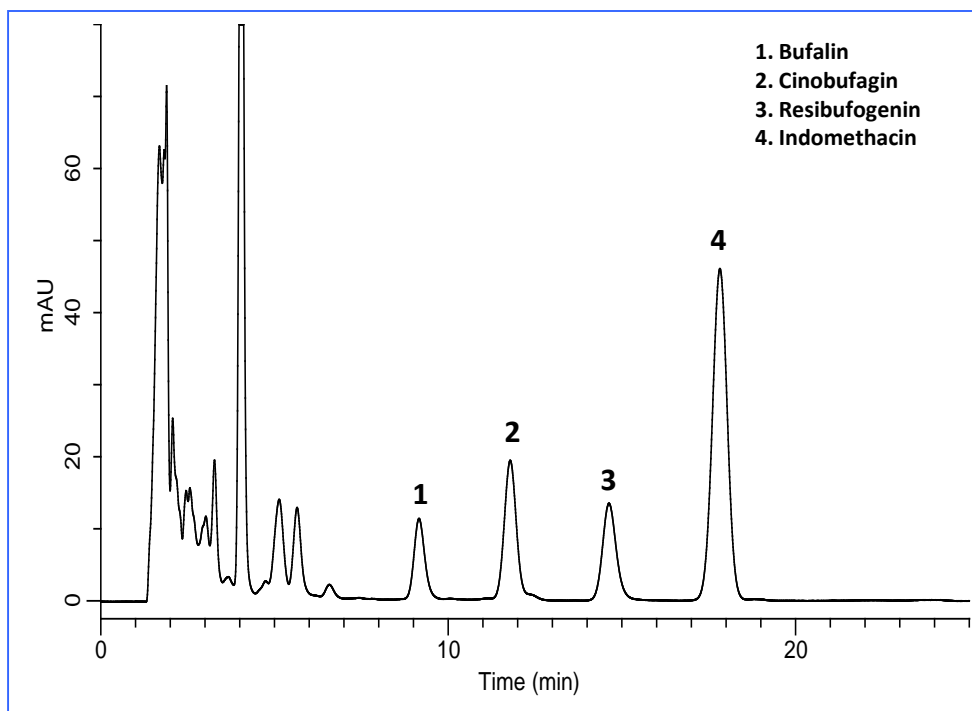
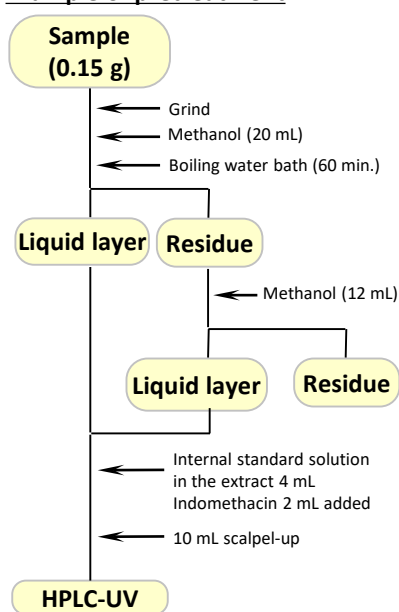


Figure 1: Calibration curve of bufosteroids.

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

Analysis of Drugs Containing Commercially Available Bufotoxin

Example of pretreatment



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