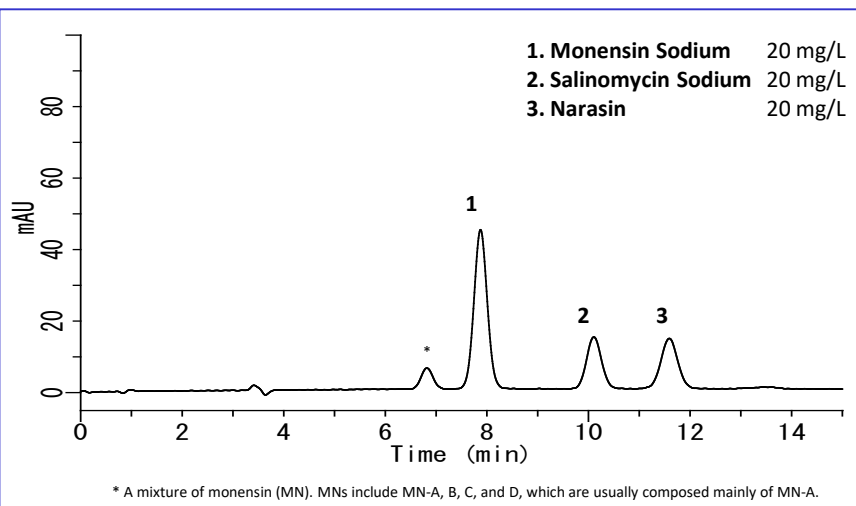


In accordance with the provisions of the Law for Ensuring the Safety of Feed and Improving the Quality of Feed for Animals, the Feed Inspection Method is compiled into Feed Inspection Practice. The test used in this protocol is stipulated in the “Feed Analysis Standards”. The present analysis was made for monensin sodium, salinomycin sodium, and narasin using a post-column HPLC method with visible detection, in accordance with the feed analytical standards.

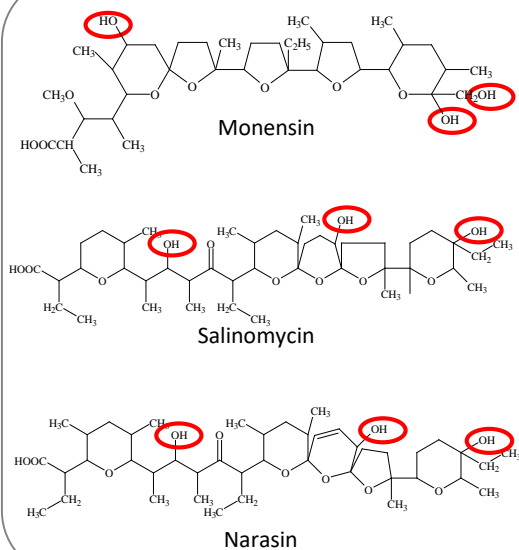
The use of a post-column HPLC enables selective detection with excellent results. It also allows simultaneous analysis of a similar polyether antibiotic, centuramycin sodium.

(K. Suzuki)

### Example: Measurement of standard



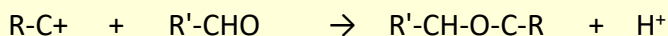
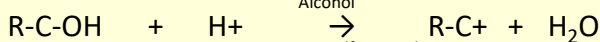
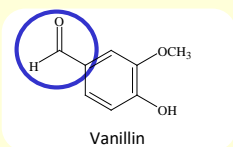
### Structural formula



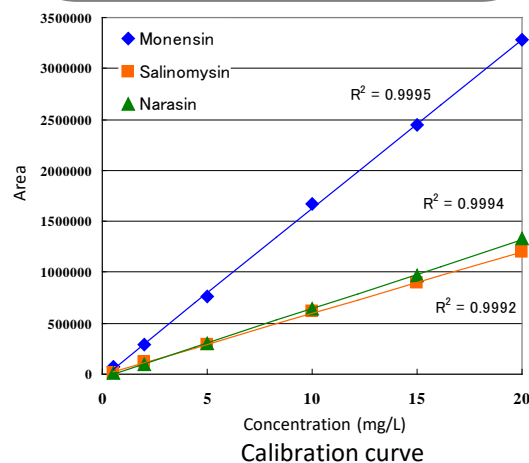
### Postcolumn reaction

In this post-column reaction, the aldehyde group of vanillin reacts with a hydroxyl group in the component of interest. An Aldol condensation produces derivatives with maximum absorption in the region of 520 nm.

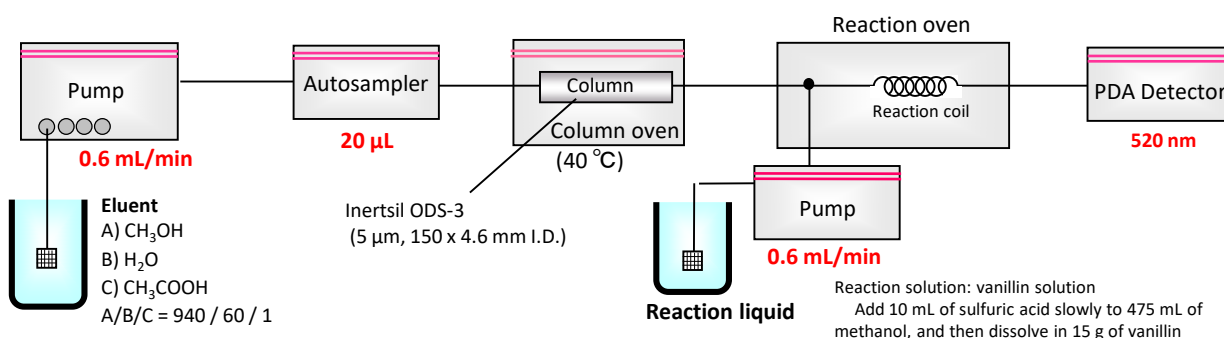
(Komarowsky response).



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



### Flow diagram and HPLC conditions



## Measurement example

### Example of pretreatment

#### Feed

- 5.0 g
- Grind

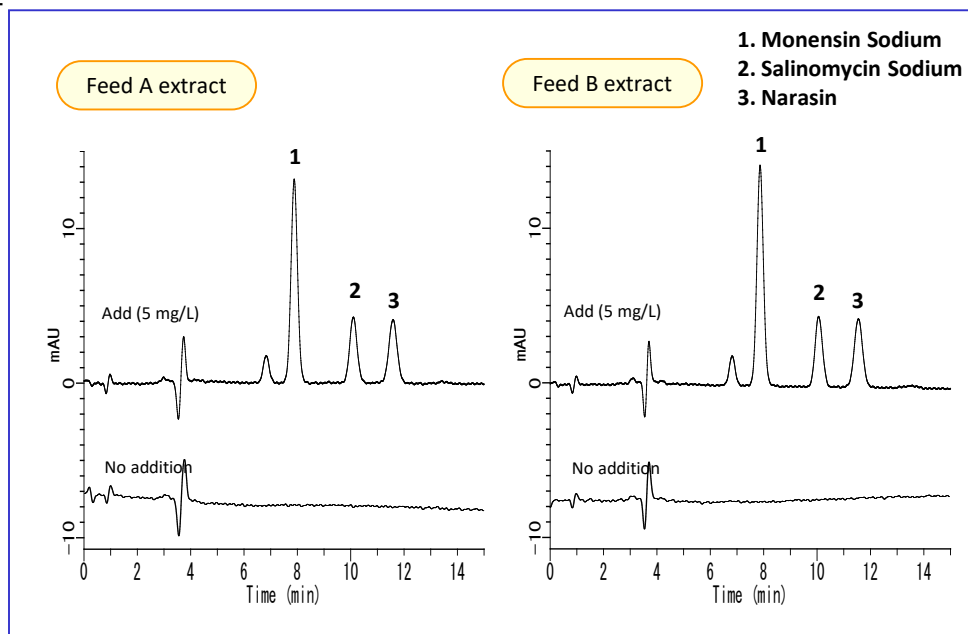
#### Extraction

- Methanol/Water (9:1) 100 mL
- Stir for 20 min.

#### Filtration

- Filtration
- Dilute the filtrate to 100 mL.
- Filter through 0.45  $\mu$ m chromatography disk.

#### HPLC



1. Monensin Sodium
2. Salinomycin Sodium
3. Narasin

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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