



Screening of 24 Synthetic Antimicrobial Compounds That Remain in Meat

Synthetic antimicrobial agents are used as animal drugs and feed additives and they are known to remain in the body of farm animals. Residue limits prescribing the safe ingestible amounts of such agents have been set so that people can safely eat meat and processed meat products. Thanks to a pretreatment method*1 that minimizes the influence of impurities in meat (beef, pork, and chicken muscle), LC system enables screening of 24 synthetic antimicrobial compounds, which are regulated in Japan, Europe, and other regions, remaining in meat.

*1: Consumables for pretreatment are not included in the package. They need to be provided by the customer.

Three Features

- Optimized pretreatment method and two detectors support screening of 24 synthetic antimicrobial compounds.
- Detects synthetic antimicrobial agents of the standard residual concentration with high sensitivity.
- Displays screening results immediately after analysis is finished.

Ľ	Target	Compounds	of the	Antimicrobial	Screening	System
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	Target Compound
1	Marbofloxacin
2	Ofloxacin
3	Ciprofloxacin
4	Danofloxacin
5	Enrofloxacin
6	Orbifloxacin
7	Sarafloxacin
8	Difloxacin

#	Target Compound
9	Oxolinic acid
10	Nalidixic acid
11	Flumequine
12	Piromidic Acid
13	Sulfadiazine
14	Sulfamerazine
15	Sulfadimidine
16	Sulfamonomethoxine

#	Target Compound
17	Trimethoprim
18	Sulfamethoxazole
19	Ormethoprim
20	Sulfadimethoxine
21	Sulfaquinoxaline
22	Pyrimethamine
23	Difurazon
24	Nicarbazin

i-Series Solution Package

Detects Synthetic Antimicrobial Agents of the Standard Residual Concentration with High Sensitivity

Comprehensively Supports Processes from Pretreatment to Checking Results

This screening system consists of an i-Series LC system and a special kit that contains analytical methods and analytical columns in order to provide ready-to-use screening of synthetic antimicrobial agents. It can reduce the time it takes for users to learn pretreatment procedures and examine conditions. Compound names, retention times, UV spectra and other data of the regulated compounds are preregistered in the analytical methods for higher data reliability.

Quinolone Agents





(A standard solution was added to chicken meat by an amount equivalent to the standard concentration.)

Displays Results Immediately After Analysis Is Finished

Measurement results for each sample can be automatically created as quantitative reports and summary reports and output in PDF. Use of the multi-data report creation function makes it easier to view large amounts of data.

Precautions

- The synthetic antimicrobial agents screening kit includes information and data that have been obtained by Shimadzu Corporation for the purpose of screening for synthetic antimicrobial agents remaining in meat. Avoid using the kit for purposes other than its intended purpose.
- 2. Customers are responsible for how any results from the use of this kit are used.
- Standard residual concentrations are determined according to the laws and regulations below
 Ministerial Notification No. 297 of the Japan's Ministry of Health, Labour and Welfare
- Development of applicable laws and regulations for the enforcement of Item 3, Article 11 of Japan's Food Sanitation Act revised based on the partial revision of the Food Sanitation Act Issued by Dept. of Food Safety, Pharmaceutical and Food Safety Bureau, Ministry of Health, Labour and Welfare (No. 1129001) on November 29, 2005 (final revision: May 31, 2007)





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