# Instructions for Use and Specification

## MC-210 (Mycoplasma Removal Agent)

Catalog# KM881012

## **Product Description**

MC-210, also sold as Mycoplasma Removal Agent (MRA), is a highly effective solution for the serious problem of mycoplasma contamination in cell cultures. MC-210 (MRA) is a derivative of the quinoline family of antibiotics and eliminates mycoplasma infection, as well as regrowth of mycoplasma, by inhibiting mycoplasma DNA gyrase. MC-210 (MRA) has been cited by the European Collection of Animal Cell Cultures (Porton Down, U.K.) as being superior to all other current products for the eradication of mycoplasma. Cell toxicity is low following treatment at the recommended concentration of 0.5 µg/mL.

Pack Size: 5 mL
Concentration: 50 μg/mL
Physical Appearance: Clear, light yellow liquid
Sterility: Sterile
Storage: MC-210 (MRA) is stable at room temperature. Protect from light.
Key Applications:

Elimination of mycoplasma contamination from cell cultures.
Eliminate multiple mycoplasma species within one week using the lowest dosage.
Maintain cell viability. Compatible with most mammalian cell lines, low cytotoxicity.<sup>1</sup>

### Using MC-210

1. Add MC-210 (MRA) to cell culture contaminated by mycoplasma at the final concentration of 0.5  $\mu g/mL$  and incubate one week.

**Example:** Add 0.1 mL of MC-210 (MRA) for 10 mL of culture media in a 25 cm<sup>2</sup> culture flask.

- 2. After 1 week, test the mycoplasma contamination by preferred detection method such as DNA staining, PCR, etc.<sup>2</sup>
- 3. Verify the elimination of mycoplasma by transferring (passage) cells several times without MC-210 (MRA) and confirm that regrowth of mycoplasma does not occur.

#### Notes:

- If media change or culture transfer (passage) is required during 1 week treatment period, use fresh MC-210 (MRA) to maintain the same concentration of MC-210 (MRA) in the media.
- The same concentration of MC-210 (MRA), 0.5 µg/mL, can be used for serum or trypsin.
- Please strictly follow the recommended concentration for use. If treatment at 0.5  $\mu$ g/mL was not effective, increase up to 1  $\mu$ g/mL.

<sup>&</sup>lt;sup>1</sup> Toxicity of MC-210 (MRA) to cultured cells is low, and cytotoxicity was not observed at the recommended concentration. However, the retention of desired cellular characteristics and absence of abnormality should be confirmed after MC-210 (MRA) treatment.

<sup>&</sup>lt;sup>2</sup> PCR method can detect signals from dead mycoplasma. Change the medium before testing to minimize false positive if PCR is used.

#### **References:**

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#### Usage Statement

Research Use Only (RUO). Unless otherwise stated in our catalog or other company documentation accompanying the product(s), our products are intended for research use only and are not to be used for any other purpose, which includes but is not limited to unauthorized commercial uses, *in vitro* diagnostic uses, *ex vivo* or *in vivo* therapeutic uses or any type of consumption or application to humans or animals.

For further questions regarding the use of MC-210 MRA, please contact us via email at <u>info@iwai-chem.com</u> or via phone at (650) 541-1486 from 9 a.m. to 6 p.m. PST.

Manufactured by: KAC Co., Ltd.