

## Background Information:

Citrinin was isolated from *Penicillium citrinum*<sup>1)</sup>, *Guanomyces polythrix*<sup>2)</sup> and other microorganisms, and phytotoxic agent. Citrinin acts as a nephrotoxin in all animal species tested, but its acute toxicity varies in different species<sup>3)</sup>. It causes mycotoxic nephropathy in livestock and has been implicated as a cause of Balkan nephropathy and yellow rice fever in humans. Citrinin is used as a reagent in biological research. It induces mitochondrial permeability pore opening and inhibits respiration by interfering with complex I of the respiratory chain. Citrinin can also act synergistically with Ochratoxin A to depress RNA synthesis in murine kidney<sup>4)</sup>.

## Handling and Storage:

Store at -20°C.

## **References:**

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- 4. Z.Itoh et al., Chemotherapy, **36**, 104 (1988).
- 5. K.Tsuzuki et al., Chem.Pharm.Bull., 37, 2687 (1988).
- 6. T.Sunazuka et al., Chem. Pharm. Bull., 37, 2701 (1989).
- 7. N.Inatomi et al., J.Pharmacol.Exp.Ther., 251, 707 (1989).
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Manufactured with Cortesy strain from The Kitasato Institute.