Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

# Ethynylcytidine

## Catalog No: tcsc0006185

### Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg

### Specifications

**CAS No:**
180300-43-0

**Formula:**
$C_{11}H_{13}N_3O_5$

**Pathway:**
Cell Cycle/DNA Damage

**Target:**
Nucleoside Antimetabolite/Analog

**Purity / Grade:**
>98%

**Solubility:**
DMSO : 83.3 mg/mL (311.70 mM; Need ultrasonic and warming)

**Alternative Names:**
ECyD;TAS-106;3'-C-Ethynylcytidine

**Observed Molecular Weight:**
267.24

## Product Description

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Ethynylcytidine is a new **nucleoside antimetabolite**.

IC50 & Target: nucleoside antimetabolite[1]

***In Vitro:*** The $IC_{50}$ values of Ethynylcytidine in the five human tumors with 4, 24 and 72 h exposure range from 0.114 to 1.032 μM, 0.015 to 0.067 μM, and 0.008 to 0.058 μM, respectively. These results suggest that the cytotoxicity of Ethynylcytidine tends to become stronger as the exposure time becomes longer. The differences in $IC_{50}$ values between the 24 and 72 h exposure times are not large, and Ethynylcytidine appeares to show sufficiently potent cytotoxicity at the 24 h exposure time in all 5 human tumors. Even at the 4 h exposure time, Ethynylcytidine clearly shows potent cytotoxicity with $IC_{50}$ values at submicromolar concentrations in 4 of the 5 human tumors[1].

***In Vivo:*** In both OCUM-2MD3 and LX-1 xenografts, tumor regression is noted and a very potent antitumor effect with an tumor growth inhibition rate (IR) on day 15 of approximately 90% or even higher is observed at the minimum toxic doses of Ethynylcytidine (TAS-106) on all three administration schedules. In particular, administration of Ethynylcytidine at 6 mg/kg once weekly exhibits a marked tumor shrinking effect with an IR of 98% against the LX-1 tumor. While Ethynylcytidine treatment on an either 3 or 5 times weekly schedule has a potent antitumor effect with an IR of approximately 85%, the IR of Ethynylcytidine once weekly is less than 60% and its antitumor effect is rather weak[1].