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

Floxuridine

Catalog No: tcsc1827

Available Sizes

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
50-91-9

Formula:
$C_9H_{11}FN_2O_5$

Pathway:
Cell Cycle/DNA Damage

Target:
Nucleoside Antimetabolite/Analog

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 150 mg/mL (609.29 mM); H2O : ≥ 50 mg/mL (203.10 mM)

Alternative Names:
5-Fluorouracil 2'-deoxyriboside

Observed Molecular Weight:
246.19

Product Description

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Floxuridine (5-fluorodeoxyuridine) is an oncology drug that belongs to the class known as antimetabolites with an GI50 of 5.1 μM for the inhibition of PEPT1.

IC50 value:

Target: Nucleoside antimetabolite/analog

Floxuridine (Fludara) is a prodrug of floxuridine and an oncology agent with an GI50 of 5.1 μM for the inhibition of MDCK/PEPT1. Floxuridine (Fludara) belongs to the class known as antimetabolites. Floxuridine (Fludara) is most often used in the treatment of colorectal cancer. Floxuridine, an analog of 5-fluorouracil, is a fluorinated pyrimidine. Floxuridine (Fludara) works because it is broken down by the body into its active form, which is the same as a metabolite of 5-Fluorouracil [1].

FdUrd induced an immediate increase in tumor uptake of 5-[(125)I]iodo-2\'-deoxyuridine, that vanished after 6 h, as also confirmed by flow cytometry. Biodistribution measurements showed that FdUrd pretreatment increased [(18)F]FLT uptake in all tumors by factors of 3.2 to 7.8 compared with controls, while [(18)F]FDG tumor uptake was about fourfold and sixfold lower in breast cancers and lymphoma. Dynamic PET in FdUrd pretreated mice showed that [(18)F]FLT uptake in all tumors increased steadily up to 1.5 h. MRI showed a well-vascularized homogenous lymphoma with high [(18)F]FLT uptake, while in breast cancer, a central necrosis shown by MRI was inactive in PET, consistent with the histomorphological analysis [2].

Clinical indications: Colorectal tumor; Liver tumor

FDA Approved Date: December 1970