

Catalog # 10-1276 5-Fluorouracil

CAS# 51-21-8 5-Fluoro-1H,3H-pyrimidine-2,4-dione 5-FU Lot # FBA2165

5-Fluorouracil (5-FU) is a clinically useful anticancer agent that acts *via* irreversible inhibition of thymidylate synthase. The active metabolites of 5-FU are 5-Fluorodeoxyuridylate (5-FdUMP), 5-Fluorodeoxyuridine triphosphate (5-FdUTP) and 5-Fluorouridine triphosphate (5-FUTP). The primary cytotoxic effect of 5-FU is believed to be inhibition of thymidylate synthase by 5-FdUMP. Secondary effects include incorporation of 5-FdUTP into DNA resulting in DNA strand breaks and incorporation of 5-FUTP into RNA causing abnormal RNA processing.¹

1) Schlisky (1998), Biochemical and Clinical Pharmacology of 5-Fluorouracil; Oncology 12 13

PHYSICAL DATA

Molecular Weight: 130.08
Molecular Formula: C₄H₃FN₂O₂
Purity: >98%

NMR: (Conforms)

Soluble in DMSO (>25 mg/ml).

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions at -20°C for

up to 1 month.

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