

Catalog #10-4052

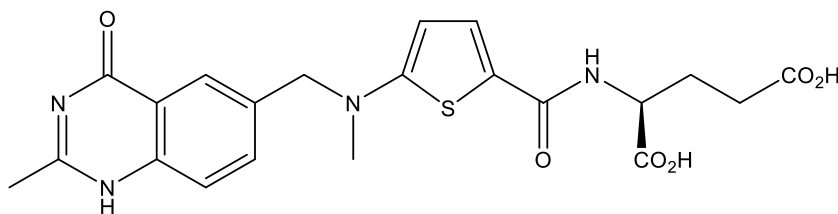
Raltitrexed

112887-68-0

(2S)-2-[[5-[Methyl-[(2-methyl-4-oxo-3H-quinazolin-6-yl)methyl]amino]thiophene-2-carbonyl]amino]pentanedioic acid;

ICI D 1694; ZD1694

Lot # FBS3090



Raltitrexed is an inhibitor of thymidylate synthase with significantly increased potency in many cancer cell lines when compared with 5-fluorouracil.^{1,2} It is also an inhibitor of the methyltransferase G9a (IC₅₀ = 120 nM) and decreased Aβ aggregates in *C. elegans* indicating therapeutic potential for the treatment of Alzheimer's disease.³

- 1) Marsham *et al.* (1991) *Quinazoline Antifolate Thymidylate Synthase Inhibitors: Heterocyclic Benzoyl Ring Modifications*; J. Med. Chem. **34** 1594
- 2) Jackman *et al.* (1995) *ZD1694(Tomudex): A New Thymidylate Synthase Inhibitor with Activity in Colorectal Cancer*; Eur. J. Cancer **31A** 1277
- 3) Jana *et al.* (2023) *Repurposing of Raltitrexed as an Effective G91/EHMT2 Inhibitor and Promising Anti-Alzheimer's Agent*; ACS Med. Chem. Lett. **14** 1531

PHYSICAL DATA

Molecular Weight:	458.49
Molecular Formula:	C ₂₁ H ₂₂ N ₄ O ₆ S
Purity:	>98% HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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