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

Nelarabine

Catalog No: tcsc1607

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
121032-29-9

Formula:
$C_{11}H_{15}N_5O_5$

Pathway:
Cell Cycle/DNA Damage

Target:
Nucleoside Antimetabolite/Analog

Purity / Grade:
>98%

Solubility:
DMSO : 9.8 mg/mL (32.97 mM; Need ultrasonic and warming)

Alternative Names:
506U78;GW 506U78;Nelzarabine

Observed Molecular Weight:
297.27

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Product Description

Nelarabine (Arranon, 506U78) is a purine nucleoside analog and DNA synthesis inhibitor with IC50 from 0.067-2.15 μM in tumor cells. Nelarabine is a chemotherapy drug used in T-cell acute lymphoblastic leukemia.

IC50 Value: 0.44 uM (HSB2 cell lines); 1.24 μM(ALL-SIL cell lines); 2.15 μM(JURKAT cell lines); 0.067 uM (PER-255 cell lines) [1]

Target: Nucleoside antimetabolite/analog

in vitro: The IC50 of Nelarabine is 25-fold and 113-fold higher than ARAC in T- and B-lineage, respectively. T-ALL cells are eightfold more sensitive to Nelarabine than B-lineage but there is considerable overlap. The efficacy of NEL in T-lineage and B-lineage cell lines is 25-fold and 113-fold less than ARAC, respectively [1].

in vivo: The median age was 34 years (range, 16-66 years); 32 (82%) patients were male. The rate of complete remission was 31% (95% confidence interval [CI], 17%, 48%) and the overall response rate was 41% (95% CI, 26%, 58%). The principal toxicity was grade 3 or 4 neutropenia and thrombocytopenia, occurring in 37% and 26% of patients, respectively [2]. Nelarabine has activity in T-cell malignancies, as evaluated in 2 Phase I and 5 Phase II studies. It received accelerated approval from the FDA based on the resuits of 2 Phase II trials, one in pediatric patients (PGAA 2001) and the other in adults (CALGB 19801)

Toxicity: The principal toxicity was grade 3 or 4 neutropenia and thrombocytopenia, occurring in 37% and 26% of patients, respectively [2].

Clinical trial: Drug Use Investigation for Arranon G (Nelarabine) Injection 250 mg.