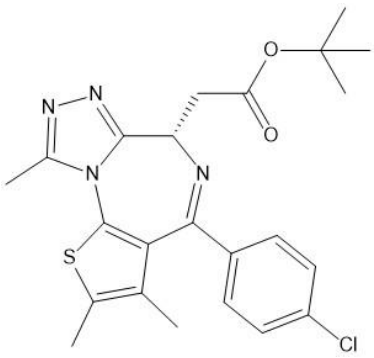
Tribioscience

JQ1 (+), Bromodomain Inhibitor

Catalog	Unit
TBI1584 - 5MG	5 mg
TBI1584 - 25MG	25 mg

Product Details

Formal Name: (6S)-4-(4-Chlorophenyl)-2,3,9-trimethyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine-6-acetic acid 1,1-dimethylethyl ester.
Molecular Formula: $C_{23}H_{25}ClN_4O_2S$.
Formula Weight: 457.
CAS Number: 1268524-70-4
Purity: ≥98%
Formulation: Powder.
Solubility: Soluble in DMSO (up to 60 mg/ml) or in Ethanol (up to 46 mg/ml).
Storage: Room temperature.
Stability: ≥ 2 years.



Applications

Bromodomain Inhibitor.

Functions

JQ1 (+) is a potent BET bromodomain inhibitor and is the active isomer. IC_{50} = 17.7, 32.6, 76.9 and 12942 nM respectively for BRD2 (N-terminal (N)), BRD4 (C-terminal (C)), BRD4 (N) and CREBBP respectively (data for + isomer). Competitive binding by JQ1 displaces the BRD4 fusion oncoprotein from chromatin, prompting squamous differentiation and specific antiproliferative effects in BRD4-dependent cell lines and patient-derived xenograft models. Induces squamous differentiation in NMC cell lines and inhibits tumor growth in NMC xenografts. Displays reversible contraceptive effects in male mice. Blocks inflammation and bone loss in periodontitis. Reverses CAR T cell extinction.

Application Procedures

JX1(+) can be first dissolved in DMSO (up to 60 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 2 months.

Relative Products

TBI1092	AICAR, AMPK activator
TBI2069	Cytochalasin B
TBI2073	Forskolin, Adenylate cyclase activator
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI1029	Dorsomorphin, AMPK inhibitor
TBI1368	Pepstatin, Aspartic protease inhibitor
TBI1060	Imatinib, Bromodomain inhibitor
TBI2584	Cilostamide, PDE3 Inhibitor
TBI1131	Cilostazol, PDE3A Inhibitor

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