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

DBeQ

Catalog No: tcsc2717

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
177355-84-9

Formula:
$C_{22}H_{20}N_4$

Pathway:
Cell Cycle/DNA Damage

Target:
p97

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 47 mg/mL (138.06 mM)

Alternative Names:
JRF 12

Observed Molecular Weight:
340.42

Product Description

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DBeQ is a selective, potent, reversible, and ATP-competitive **p97** inhibitor, with an **IC_{50}** value of 1.5 μM and 1.6 μM for p97(wt) and p97(C522A), respectively; DBeQ also inhibits **Vps4** with an **IC_{50}** of 11.5 μM.

IC50 & Target: IC50: 1.5 μM (p97)[1], 11.5 μM (Vps4)[2]

In Vitro: DBeQ is a ATP-competitive p97 inhibitor, with an IC_{50} value of 1.5 μM and 1.6 μM for p97(wt) and p97(C522A), respectively. DBeQ inhibits p97 competitively with respect to ATP, with a K_i of 3.2 ± 0.4 μM. DBeQ inhibits degradation of the p97-dependent substrate UbG76V-GFP, with IC_{50} value of 2.6 μM. DBeQ (10 μM) also significantly suppresses degradation of TCRα-GFP, induces CHOP but does not increase p21 level. Moreover, DBeQ inhibits the viability of MRC-5, Hek293, HeLa and RPMI8226 cells, with GI_{50}s of 6.6 ± 2.9, 4 ± 0.6, 3.1 ± 0.5 and 1.2 ± 0.3, respectively[1]. DBeQ potently inhibits the AAA ATPase p97 by specifically binding to the ATPase site of its D2 domain (p97D2). DBeQ also inhibits Vps4, with an IC_{50} of 11.5 μM. Furthermore, DBeQ (30 μM) inhibits hyphal growth of the wild-type cell (strain YLZ0)[2].