LKT Laboratories, Inc.

(+)-JQ-1

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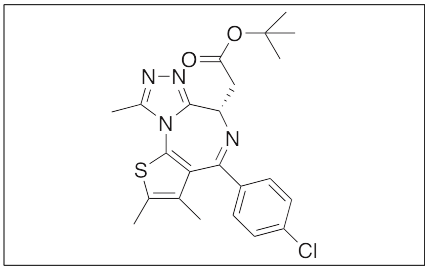
Product Information

Product ID J6400
CAS No. 1268524-70-4
Chemical Name

Synonym JQ1

Formula $C_{23}H_{25}ClN_4O_2S$
Formula Wt. 456.99
Melting Point 109.5°C
Purity ≥99%
Solubility

DMSO	91 mg/mL warmed (199.12 mM)
Ethanol	91 mg/mL (199.12 mM)
Water	Insoluble



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
J6400	1 mg	$85.20
J6400	5 mg	$255.20
J6400	25 mg	$781.10

Store Temp -20°C
Ship Temp Ambient

Description JQ-1 is a triazolothienodiazepine compound that inhibits the BET bromodomain (BRD) family of proteins. Although it is a diazepine-like compound, JQ-1 exhibits no sedative or anxiolytic efficacy. JQ-1 was initially in development as a non-hormonal male contraceptive, inhibiting bromodomain testis-specific protein BRDT and chromatin remodeling during spermatogenesis, therefore preventing sperm production. This compound also activates latent HIV-1 in vitro and inhibits T cell proliferation through downregulation of T cell activation signals CD3, CD28, and CXCR4; JQ-1 is currently used as an experimental tool for examining mechanisms of HIV-1 latency. Additionally, JQ-1 exhibits anticancer chemotherapeutic activity in vitro and in vivo; through its inhibition of BRD4, JQ-1 suppresses Myc expression, IL-7R expression, and reduces JAK/STAT phosphorylation, inducing cell cycle arrest and altering survival in a variety of cell lines. Biological bromodomain binding activity comes primarily from (+)-JQ-1; the (-)-JQ-1 stereoisomer does not bind BET bromodomains.

References

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