



## Product Specification Sheet

**Product Name:** (+)-JQ-1

**Catalog Number:** C5701

**Technical information:**

Chemical Formula:  $C_{23}H_{25}ClN_4O_2S$

CAS #: 1268524-70-4

Molecular Weight: 456.99

Purity: > 98%

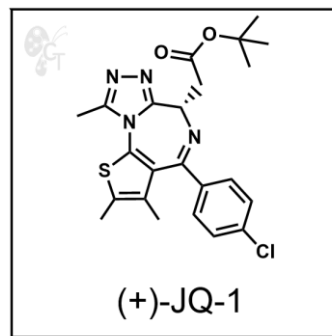
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical 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

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.219mL of DMSO for each mg of (+)-JQ-1.
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** (+)-JQ-1 is a highly potent and selective BET bromodomain BRD2/4 inhibitor that showed activity impairing mouse macrophage inflammatory response [1], activating HIV latency [2], and blocking the BET mediated acetylation and transcriptions of c-Myc [3].

- Reference:**
1. Anna C, et al. BET protein function is required for inflammation: Brd2 genetic disruption and BET inhibitor JQ1 impair mouse macrophage inflammatory responses. *J Immunol.* 2013; 190(7): 3670–3678. Pubmed ID: 23420887
  2. Li Z, et al, The BET bromodomain inhibitor JQ1 activates HIV latency through antagonizing Brd4 inhibition of Tat-transactivation. *Nucleic Acids Res.* 2013; 41(1): 277–287. Pubmed ID: 23087374
  3. Alqahtani A, et al. Bromodomain and extra-terminal motif inhibitors: a review of preclinical and clinical advances in cancer therapy. *Future Sci OA.* 2019; 5(3): FSO372 Pubmed ID: 30906568

To reorder: <http://www.cellagentech.com/+JQ-1/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

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