**Product Specification Sheet**

**Product Name:** TG101209  
**Catalog Number:** C8120

**Technical Information:**

- **Chemical Formula:** $\text{C}_{26}\text{H}_{35}\text{N}_{7}\text{O}_{2}\text{S}$
- **CAS #:** 936091-14-4
- **Molecular Weight:** 509.67
- **Purity:** > 98%
- **Appearance:** White solid
- **Solubility:** Soluble in DMSO up to 100mM
- **Chemical Name:** N-tert-butyl-3-(5-methyl-2-(4-(4-methylpiperazin-1-yl)phenylamino)pyrimidin-4-ylamino)benzenesulfonylamide
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
- **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 0.196mL of DMSO for each mg of TG101209.
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:**

TG101209 is an orally-available, diaminopyrimidine-based inhibitor of JAK2 and Flt3 with IC50 values of 6, 25, and 17 nM, respectively. [1] In a human JAK2V617F-expressing acute myeloid leukemia cell line, TG101209 induced cell cycle arrest (G0/G1) and apoptosis, and inhibits phosphorylation of JAK2V617F, STAT5, and STAT3 at doses between 300-600 nM. In MM1S cells, however, a time-dependent cell cycle arrest was observed in the G2/M stages. [2]

TG101209 was recently utilized in studying a novel BCR-JAK2 tyrosine kinase in which the BCR oligomerization domain is fused to the JAK2 tyrosine-kinase domain. [3]

In lung cancers, TG101209 was shown to inhibit STAT3 activation and survivin expression, and sensitized HCC2429 and H460 cells to radiation in clonogenic assays. [4]

**Reference:**


**To reorder:**  [http://www.cellagentech.com/TG101209/](http://www.cellagentech.com/TG101209/)

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

*Chemicals are sold for research use only, not for clinical or diagnostic use.*