# PRODUCT INFORMATION



# TG101209

Item No. 14696

CAS Registry No.: 936091-14-4

Formal Name: N-(1,1-dimethylethyl)-3-

[[5-methyl-2-[[4-(4-methyl-1-piperazinyl)phenyl]

amino]-4-pyrimidinyl]amino]-

benzenesulfonamide

 $C_{26}H_{35}N_7O_2S$ MF:

509.7 FW: **Purity:** ≥98%

UV/Vis.:  $\lambda_{max}$ : 282 nm A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# **Laboratory Procedures**

TG101209 is supplied as a crystalline solid. A stock solution may be made by dissolving the TG101209 in the solvent of choice. TG101209 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of TG101209 in these solvents is approximately 0.12, 12.5, and 16 mg/ml, respectively.

TG101209 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TG101209 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. TG101209 has a solubility of approximately0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

TG101209 is a potent inhibitor of the tyrosine kinases janus kinase (JAK) 2, FMS-like tyrosine kinase 3, proto-oncogene RET, and JAK3 ( $IC_{50}$  = 6, 25, 17, and 169 nM, respectively). Through these effects, it induces cell cycle arrest and apoptosis in leukemic cell lines and CD45<sup>+</sup> myeloma cells.<sup>1,2</sup>

#### References

- 1. Pardanani, A., Lasho, T., Levine, R.L., et al. TG101209, a small molecule JAK2-selective kinase inhibitor potently inhibits myeloproliferative disorder-associated JAK2V617F and MPLW515L/K mutations. Leukemia 21(8), 1658-1668 (2007).
- 2. Ramakrishnan, V., Kimlinger, T., Haug, J., et al. TG101209, a novel JAK2 inhibitor, has significant in-vitro activity in multiple myeloma and displays preferential cytotoxicity for CD45<sup>+</sup> myeloma cells. Am. J. Hematol. 85(9), 675-686 (2010).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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