

GW2580

Catalog Number: 8708778

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: GW 2580, 5-(3-methoxy-4-((4-methoxybenzyl)oxy)benzyl)pyrimidine-2,4-diamine

 $\textbf{Chemical Name:} \ 5 \hbox{-} [[3-methoxy-4-[(4-methoxyphenyl)methoxy] phenyl] methyl] pyrimidine-2, 4-diamine-2, 4-diamine$

Molecular Formula: $C_{20}H_{22}N_4O_3$

Molecular Weight: 366.4 **CAS Number:** 870483-87-7

Purity: ≥98% **Applications:** FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.

Description

GW2580 is a highly selective inhibitor of the cFMS kinase and through this pathway this small molecule blocks colony stimulating factor 1 (CSF-1) signaling. It is reported to inhibit CSF-1 induced monocyte growth and bone degradation in vitro in mice arthritis models.

Preparation & Storage

Soluble in organic solvents such as DMF or DMSO. DMSO up to 27mM.

References

- 1.Conway, J. G., McDonald, B., Parham, J., Keith, B., Rusnak, D. W., Shaw, E., ... Hutchins, J. T. (2005). Inhibition of colony-stimulating-factor-1 signaling in vivo with the orally bioavailable cFMS kinase inhibitor GW2580.; Proceedings of the National Academy of Sciences of the United States of America,; 102(44), 16078-16083.
- 2. Xu, J., Escamilla, J., McBride, W., Wu, L. (2011). Abstract C227: Blockade of tumor-infiltrating myeloid cells by inhibiting CSF-1 receptor overcomes tumor recurrence after radiation therapy.; Molecular Cancer Therapeutics,; 10(11 Supplement), C227-C227.
- 3. Komohara, Y., Hasita, H., Ohnishi, K., Fujiwara, Y., Suzu, S., Eto, M., Takeya, M. (2011). Macrophage infiltration and its prognostic relevance in clear cell renal cell carcinoma.; Cancer science,;102(7), 1424-1431.