

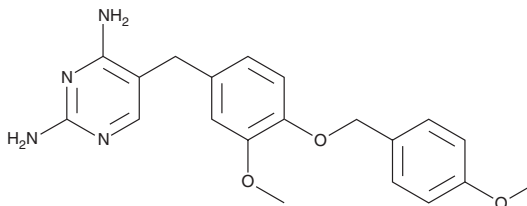
# PRODUCT INFORMATION



## GW 2580

Item No. 15411

**CAS Registry No.:** 870483-87-7  
**Formal Name:** 5-[[3-methoxy-4-[(4-methoxyphenyl)methoxy]phenyl]methyl]-2,4-pyrimidinediamine  
**MF:** C<sub>20</sub>H<sub>22</sub>N<sub>4</sub>O<sub>3</sub>  
**FW:** 366.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 228, 283 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

GW 2580 is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 2580 in the solvent of choice, which should be purged with an inert gas. GW 2580 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of GW 2580 in these solvents is approximately 10 and 2 mg/ml, respectively.

### Description

cFMS kinase is the cellular homolog of the v-FMS oncogene product of the Susan McDonough strain of the feline sarcoma virus. It can autophosphorylate colony-stimulating factor (CSF-1), which promotes the survival, proliferation, and differentiation of mononuclear phagocytes. GW 2580 selectively inhibits cFMS kinase (IC<sub>50</sub> = 0.03 μM), preventing CSF-1-induced monocyte growth with an IC<sub>50</sub> value of 0.14 μM.<sup>1</sup> At 75-100 mg/kg, it has been shown to inhibit joint connective tissue and bone degradation in mouse models of arthritis.<sup>1</sup>

### Reference

1. Conway, J.G., Pink, H., Bergquist, M.L., *et al.* Effects of the cFMS kinase inhibitor 5-(3-methoxy-4-((4-methoxybenzyl)oxy)benzyl)pyrimidine-2,4-diamine (GW2580) in normal and arthritic rats. *J. Pharmacol. Exp. Ther.* **326**(1), 41-50 (2008).

#### WARNING

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)