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## Product Information

Product ID S5868

CAS No. 284461-73-0

## **Chemical Name**

Synonym 4-[4-[[4-chloro-3-(trifluoromethyl)phenyl]carbamoylamino]phenoxy]-N-methylpyridine-2-carboxamide, BAY 43-9006

 Formula
 C21H16CIF3N4O3

 Formula Wt.
 464.82

 Melting Point
 202-204°C

 Purity
 ≥98%

 Solubility
 DMSO 127mg/mL, water:0.01mg/mL



## Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
S5868	25 mg	\$57.60
S5868	100 mg	\$173.30

## Store Temp Ambient

Ship Temp Ambient

Description Sorafenib is an inhibitor of c-Raf, Ret, and VEGFR2 that is currently used clinically to treat renal cell carcinoma and hepatocellular carcinoma, as well as other advanced cancers. Sorafenib exhibits anticancer chemotherapeutic, anti-angiogenic, and immunosuppressive activities. In osteosarcoma cells, sorafenib inhibits cell proliferation by downregulating expression of ERK and VEGFR2 and inhibiting phosphorylation of VEGFR2, RET, and MEK1. In cellular and animal models of lymphoma, sorafenib inhibits phosphorylation of MAPKs and PI3K/Akt, decreasing vessel density and increasing apoptotic cell death. Sorafenib also inhibits the epithelial-to-mesenchymal transition (EMT) in epithelial cells and potentiates histone acetylation. In hepatoma cells, this compound decreases levels of enhancer of zeste homolog 2 (EZH2) and inhibits histone methyltransferase (HMT) activity, inducing apoptosis. In animal models, sorafenib inhibits tumor growth, increases tumor-specific T cells, and decreases CD8+ and Treg T cell functions by inducing T cell apoptosis. Additionally, sorafenib inhibits phosphorylation of STAT3/5.

**References** Mei J, Zhu X, Wang Z, et al. VEGFR, RET, and RAF/MEK/ERK Pathway Take Part in the Inhibition of Osteosarcoma MG63 Cells with Sorafenib Treatment. Cell Biochem Biophys. 2013 Dec 31. [Epub ahead of print]. PMID: 24375110.

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Panka DJ, Wang W, Atkins MB, et al. The Raf inhibitor BAY 43-9006 (Sorafenib) induces caspase-independent apoptosis in melanoma cells. Cancer Res. 2006 Feb 1;66(3):1611-9. PMID: 16452220.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.