



Product Data Sheet

Compound Name	Sorafenib
4-[4-[[4-chloro-3-(trifluoromethyl)phenyl]carbamoylamino]phenoxy]-N-methylpyridine-2-carboxamide	Catalog Number SY-Sorafenib
Alternative names: Nexavar, 284461-73-0, sorafenibum, Sorafenib [INN], Kinome_766, UNII-9ZOQ3TZI87, AC1L50CF, BAY-43-9006, CHEMBL1336	
Structure	
	CAS Number [284461-73-0] Molecular Weight 464.82495 Molecular Formula: C ₂₁ H ₁₆ ClF ₃ N ₄ O ₃ Purity: HPLC: 99.8% @ 254nm (ESI-MS): 465.0 [M+1] 1H-NMR: ✓
Mode of Action: InChI: InChI=1S/C21H16ClF3N4O3/c1-26-19(30)18-11-15(8-9-27-18)32-14-5-2-12(3-6-14)28-20(31)29-13-4-7-17(22)16(10-13)21(23,24)25/h2-11H,1H3,(H,26,30)(H,28,29,31) InChIKey: MLDQJTXFUGDVEO-UHFFFAOYSA-N Canonical SMILES: CNC(=O)C1=NC=CC(=C1)OC2=CC=C(C=C2)NC(=O)NC3=CC(=C(C=C3)Cl)C(F)(F)F Pubchem ID: CID 216239 ChemSpider ID: 187440	
Predominant Target(s): Raf kinase, PDGFR, VEGF Receptor 2&3, and c-Kit for SCF, Raf/Mek/Erk pathway.	
Published Activity: Sorafenib is a multi-kinase inhibitor targeting a number of serine/threonine and receptor tyrosine kinases. It inhibits Raf-1, B-Raf and VEGFR-2 with IC50 values of 6 nM, 22 nM and 90 nM, respectively. Used in the	

	research of primary kidney cancer(advanced renal cell carcinoma) and advanced primary liver cancer (hepatocellular carcinoma treatments and potentially in other cancers as well.
Development stage:	Approved by FDA and received E.U. marketing authorization as the drug Nexavar.
Use Instructions:	Dissolve in DMSO, keep out of direct light.
Storage & Handling:	Store dry, unopened vial at 4°C, protected from light for up to 3 months; long term storage store unopened vial, protected from light at -20°C for up to 1 year. Liquefy material in 100% ACS grade DMSO or ethanol. Store liquefied material at -80°C, in aliquots, protected from light, for up to 1 month. Prevent multiple freeze-thaw cycles.
<p>References & Background information</p> <p>Sorafenib is for research use only, not for diagnostic use, not for therapeutic use, not for human use or consumption</p> <p>Thompson N et al (2005) Curr. Opin. Pharmacol. 5(4):350-6. PMID:15955734</p> <p>Yiu-Keung Lau et al (2007) <i>Sorafenib: new reference standard for systemic treatment of advanced hepatocellular carcinoma</i>. Commun. Oncol. 4, 528-530.</p> <p>Sorafenib is an anticancer compound effective against kidney cancer called advanced renal cell carcinoma (RCC), a certain type of liver cancer known as hepatocellular carcinoma (HCC), when it cannot be treated with surgery, or a certain type of thyroid cancer called differentiated thyroid carcinoma (DTC) that can no longer be treated with radioactive iodine and is progressing.</p>	