

Product Specification Sheet

Product Name: BAY-73-4506 (Regorafenib)

Catalog Number: C2734

Technical information:

Chemical Formula: $C_{21}H_{15}ClF_4N_4O_3$

CAS #: 755037-03-7

Molecular Weight: 482.82

Purity: > 98%

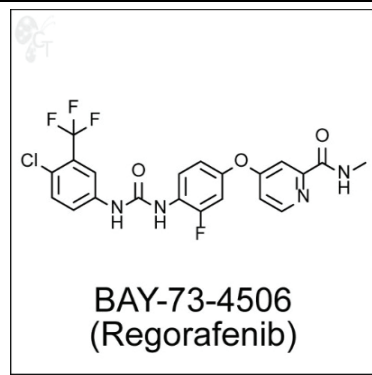
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 1-(4-chloro-3-(trifluoromethyl)phenyl)-3-(2-fluoro-4-(2-(methylcarbamoyl)pyridin-4-yloxy)phenyl)urea

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.207mL of DMSO for each mg of BAY-73-4506 (Regorafenib).
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: BAY-73-4506 (Regorafenib) is an orally active and highly potent inhibitor against multiple tyrosine kinases, including VEGFR1/2/3, PDGFR β , Kit, RET and Raf-1. Regorafenib inhibits the proliferation of HUVEC cells stimulated with VEGF, and inhibits FGFR signaling in breast cancer MCF-7 cells stimulated with FGF. Regorafenib is anti-angiogenic due to its inhibitions against VEGFR2-TIE2 tyrosine kinase. [1]

Co-administration of Regorafenib and a PI3K/Akt inhibitor (MK-2206) clearly demonstrated synergistic effect in a HCT116 xenocraft mouse model [2]. Regorafenib is currently being studied as a potential treatment option in multiple tumor types, and has recently be approved in treating patients with Metastatic Colorectal cancer. [3]

- Reference:**
1. Wilhelm SM et al, Regorafenib (BAY 73-4506): a new oral multi-kinase inhibitor of angiogenic, stromal and oncogenic receptor tyrosine kinases with potent preclinical antitumor activity. Int J Cancer. 2011; 129:245-55. Pubmed ID: 21170960
 2. Sajithlal GB et al. Sorafenib/regorafenib and phosphatidyl inositol 3 kinase/thymoma viral proto-oncogene inhibition interact to kill tumor cells. Mol Pharmacol. 2013; 84(4):562-71. Pubmed ID: 23877009
 3. Carter NJ. Regorafenib: a review of its use in previously treated patients with progressive metastatic colorectal cancer. Drugs Aging. 2014; 31(1):67-78. Pubmed ID: 24276917

To reorder: <http://www.cellagentech.com/BAY-73-4506-Regorafenib/>
For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.