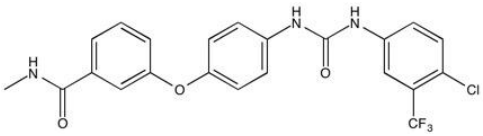
Tribioscience

# Sorafenib, Raf-1 inhibitor (and other kinases)

| Catalog | Unit |
|---|---|
| TBI2174 - 10MG | 10 mg |
| TBI2174 - 50MG | 50 mg |

## Product Details

**Formal Name:** 4-(4-(3-(4-chloro-3-(trifluoromethyl)phenyl)ureido)phenoxy)-N-methylpicolinamide
**Alternate Names:** BAY 43-9006
**Molecular Formula:** $C_{21}H_{16}ClF_3N_4O_3$
**Formula Weight:** 464.83
**CAS Number:** 284461-73-0
**Purity:** >98%
**Formulation:** Powder
**Solubility:** Soluble in DMSO (up to 200 mg/ml) or in Ethanol (up to 3 mg/ml).
**Storage:** -20°C
**Stability:** ≥ 2 years.



## Applications

Raf-1 inhibitor (and other kinases)

## Functions

Sorafenib (475207-59-1) was initially developed as a Raf kinase inhibitor, $IC_{50}$ = 6 nM, but has been shown to inhibit many receptor tyrosine kinases including BRAF ($IC_{50}$ = 22 nM); VEGFR-2 ($IC_{50}$ = 90 nM); VEGFR-3 ($IC_{50}$ = 20 nM); PDGFR-β ($IC_{50}$ = 57 nM); Flt3 ($IC_{50}$ = 58 nM); c-KIT ($IC_{50}$ = 68 nM); FGFR-1 ($IC_{50}$ = 580 nM). Paradoxically more potent in a cellular assay ($IC_{50}$ = 20 nM) compared to an isolated enzyme assay ($IC_{50}$ = 107 nM) for c-Fms. Inhibits activation of MAPK pathway and ERK phosphorylation. Induces caspase-independent apoptosis in melanoma cells. Sorafenib is a clinically useful anticancer agent.

## Application Procedures

First dissolved in DMSO (up to 200 mg/ml) or in Ethanol (up to 3 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

## Relative Products

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| TBI1170 | Mitomycin C |
| TBI1345 | E64, Cysteine protease inhibitor |
| TBI1347 | E64d, Cysteine protease inhibitor |
| TBI2064 | Chromomycin A3 |
| TBI2069 | Cytochalasin B |
| TBI2794 | 5-EDU, DNA Click labeling probe |
| TBI2071 | Cytochalasin D |
| TBI1286 | Bestatin, Aminopeptidase inhibitor |
| TBI2140 | Gemcitabline |
| TBI2058 | Aphidicolin, DNA polymerase Inhibitor |

**For research use only.**