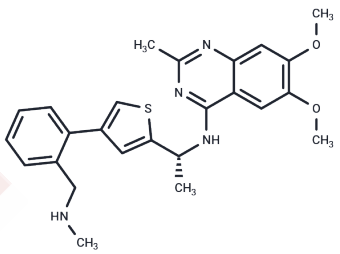
# Data Sheet (Cat.No.T5418)

TargetMol

BAY-293

## Chemical Properties



CAS No. : 2244904-70-7

Formula: C25H28N4O2S

Molecular Weight: 448.58

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

## Biological Description

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|---|---|
| Description | BAY-293 is a potent, cell-active SOS1 inhibitor that disrupts the KRAS-SOS1 interaction (IC50: 21 nM). |
| Targets(IC50) | Raf,Ras |
| In vitro | BAY-293 is a SOS1 inhibitor that disrupts the KRAS-SOS1 interaction with IC50 of 21 nM and displays no significant activity against KRAS WT-CRAF RBD, CDC42 and EGFR (>20 uM). It inhibits the activation of RAS in HeLa cells with IC50 of 410 nM, efficiently inhibits pERK levels in K562 cells after incubation for 60 min without affecting total protein levels of ERK (IC50: 180 nM). BAY-293 shows antiproliferative activity against wild-type KRAS cell lines (K562, MOLM-13; IC50~1 uM) and cell lines with KRASG12C mutation (NCI-H358, Calu-; IC50~3 uM) by preventing the formation of the KRAS-SOS1 complex. |

## Solubility Information

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|---|---|
| Solubility | DMSO: 250 mg/mL (557.31 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (8.92 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.2293 mL | 11.1463 mL | 22.2926 mL |
| 5 mM | 0.4459 mL | 2.2293 mL | 4.4585 mL |
| 10 mM | 0.2229 mL | 1.1146 mL | 2.2293 mL |
| 50 mM | 0.0446 mL | 0.2229 mL | 0.4459 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hillig RC, et al. Discovery of potent SOS1 inhibitors that block RAS activation via disruption of the RAS-SOS1interaction. Proc Natl Acad Sci U S A. 2019 Feb 12;116(7):2551-2560.
Stickler S, Lang C, Rieche M, et al.Characterization of a pleomorphic rhabdomyosarcoma cell line.Scientific Reports.2025, 15(1): 2893.