# SR-4133

**Cat. No.:** HY-149292

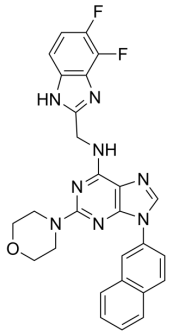
**Molecular Formula:** $C_{27}H_{22}F_2N_8O$

**Molecular Weight:** 512.51

**Target:** Casein Kinase

**Pathway:** Cell Cycle/DNA Damage; Stem Cell/Wnt

**Storage:** Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

**Description**

SR-4133 is a potent and highly CK1ε selective inhibitor with an $IC_{50}$ of 58 nM. SR-4133 binds to the ATP-binding site of CK1ε. SR-4133 displays nanomolar growth inhibition of bladder cancer cells, and inhibits the phosphorylation of 4E-BP1[1].

**$IC_{50}$ & Target**

| CK1ε | CK1δ |
|---|---|
| 58 nM ($IC_{50}$) | 10 μM ($IC_{50}$) |

**In Vitro**

SR-4133 (200-600 nM, 72 h) inhibits cancer cells growth significantly with $EC_{50}$s of 265 nM (T24), 314 nM (5637), 540 nM (UM-UC-3 EC), 373 nM (U2-OS EC)[1].

SR-4133 (1 μM, 24 h) inhibits the phosphorylation of 4E-BP1 in T24 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

| | |
|---|---|
| Cell Line: | T24, 5637, UM-UC-3, U2-OS |
| Concentration: | 265 nM, 314 nM, 540 nM, 373 nM |
| Incubation Time: | 72 h |
| Result: | Inhibited cell growth with $EC_{50}$s of 265 nM (T24), 314 nM (5637), 540 nM (UM-UC-3 EC), 373 nM (U2-OS EC). |

Western Blot Analysis[1]

| | |
|---|---|
| Cell Line: | T24 |
| Concentration: | 1 μM |
| Incubation Time: | 24 h |
| Result: | Blocked the phosphorylation of T37/46, S65, and T70 of 4E-BP1. |

## REFERENCES

[1]. Choi JY, et al. Structure-Based Development of Isoform-Selective Inhibitors of Casein Kinase 1ε vs Casein Kinase 1δ. J Med Chem. 2023 Jun 8;66(11):7162-7178.



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