# PROTAC SGK3 degrader-1

**Cat. No.:** HY-125878

**CAS No.:** 2381320-35-8

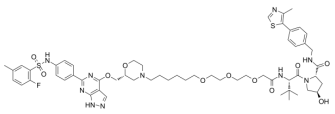
**Molecular Formula:** $C_{57}H_{73}FN_{10}O_{11}S_2$

**Molecular Weight:** 1157.38

**Target:** PROTACs; SGK

**Pathway:** PROTAC; Metabolic Enzyme/Protease

**Storage:** -20°C, stored under nitrogen
* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : ≥ 100 mg/mL (86.40 mM)
* "≥" means soluble, but saturation unknown.

**Preparing Stock Solutions**

| Mass / Solvent / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 0.8640 mL | 4.3201 mL | 8.6402 mL |
| 5 mM | 0.1728 mL | 0.8640 mL | 1.7280 mL |
| 10 mM | 0.0864 mL | 0.4320 mL | 0.8640 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (2.16 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (2.16 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

PROTAC SGK3 degrader-1 (SGK3-PROTAC1), is a potent SKG3 degrader based on von Hippel-Lindau ligand. PROTAC SGK3 degrader-1 (0.3 μM) induces 50% degradation of endogenous SGK3 within 2 hours, with maximal 80% degradation observed within 8 hours, accompanied by a loss of phosphorylation of NDRG1 (an SGK3 substrate)[1].

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

SGK3

**In Vitro**

PROTAC SGK3 degrader-1 (SGK3-PROTAC1) (0.3 μM, 4 weeks) in combination with GDC0941 inhibits cell growth in CAMA-1 or ZR-75-1 cells[1].
PROTAC SGK3 degrader-1 (0.1 μM, 48 h) reduces SGK3 levels by 65% without effecting SGK1, SGK2, or S6K1 in HEK293 cells[1].

PROTAC SGK3 degrader-1 (1-10 μM, 48 h) moderate reduces S6K1 levels in HEK293 cells[1].
PROTAC SGK3 degrader-1 ( >0.1 μM, 8 h) reduces NDRG1 phosphorylation in HEK293 cells, and induces degradation of SGK3, but not SGK1 or S6K in CAMA-1 and ZR-75-1cells [1].

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

Cell Viability Assay[1]

| | |
|---|---|
| Cell Line: | CAMA-1 or ZR-75-1 cells |
| Concentration: | 0.3 μM |
| Incubation Time: | 4 weeks |
| Result: | Inhibited cell growth in combination with GDC0941. |

Western Blot Analysis[1]

| | |
|---|---|
| Cell Line: | HEK293 cells |
| Concentration: | 0.1 μM |
| Incubation Time: | 48 h |
| Result: | Reduced SGK3 levels by 65% without effecting SGK1, SGK2, or S6K1. |

## CUSTOMER VALIDATION

- Redox Biol. 2023 Oct 16, 102931.

See more customer validations on www.MedChemExpress.com

## REFERENCES

[1]. Tovell H, et al. Design and Characterization of SGK3-PROTAC1, an Isoform Specific SGK3 Kinase PROTAC Degrader. ACS Chem Biol. 2019 Sep 20;14(9):2024-2034.



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