# TL4-12

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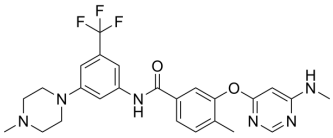
|---|---|
| **Cat. No.:** | HY-123714 |
| **CAS No.:** | 1620820-12-3 |
| **Molecular Formula:** | $C_{25}H_{27}F_3N_6O_2$ |
| **Molecular Weight:** | 500.52 |
| **Target:** | MAP4K; Apoptosis |
| **Pathway:** | MAPK/ERK Pathway; Apoptosis |
| **Storage:** | -20°C, sealed storage, away from moisture<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 8.33 mg/mL (16.64 mM; ultrasonic and warming and heat to 60°C)

| Preparing Stock Solutions | Mass / Solvent / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 1.9979 mL | 9.9896 mL | 19.9792 mL |
| | 5 mM | 0.3996 mL | 1.9979 mL | 3.9958 mL |
| | 10 mM | 0.1998 mL | 0.9990 mL | 1.9979 mL |

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

## BIOLOGICAL ACTIVITY

**Description**

TL4-12 is a selective MAP4K2/GCK inhibitor, dose-dependently downregulates IKZF1 and BCL-6 and leads to MM cell proliferation inhibition ($IC_{50}$=37 nM) accompanied by induction of apoptosis. TL4-12 can be used to overcome immunomodulatory agent resistance in multiple myeloma (MM)[1].

**In Vitro**

TL4 12 (0-5 μM; 4 days) shows antiproliferation activity with an $IC_{50}$ value of 37 nM for MM cells, and with $IC_{50}$s of 1.62, 3.7, 4.4, 5.7, 10, 32, 49, 19 μM for JJN3, MM1.S, H929, RPMI-8226, MOLP-8, SKMM2, LP-1, U266 cells, respectively[1].

.TL4-12 (0, 1, 3 μM; 24 h) dose-dependently decreases IKZF1, c-MYC, and BCL-6 protein expression and increases p53 level in K-RASG12A MM.1S cells[1].

TL4-12 dose-dependently increases Annexin-V positive cell from 6% (dimethyl sulfoxide) to 13% (1 μM) and 22% (3 μM), respectively[1].

TL4-12 induces apoptosis and cell-cycle arrest in the G0/G1 phase in MM.1S, RPMI-8226, RPMI-8226 cells[1].

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

## REFERENCES

[1]. Shirong Li, et al. Targeting the GCK pathway: a novel and selective therapeutic strategy against RAS-mutated multiple myeloma. Blood. 2021 Apr 1;137(13):1754-1764.



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