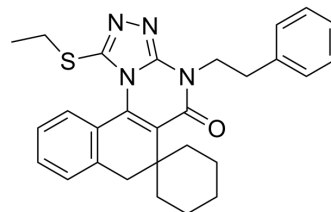


NR2F1 agonist 1

| | |
|---------------------------|--|
| Cat. No.: | HY-149913 |
| CAS No.: | 374101-64-1 |
| Molecular Formula: | C ₂₈ H ₃₀ N ₄ OS |
| Molecular Weight: | 470.63 |
| Target: | Others |
| Pathway: | Others |
| Storage: | 4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen) |



BIOLOGICAL ACTIVITY

| | |
|------------------------|---|
| Description | NR2F1 agonist 1, a nuclear receptor NR2F1 agonist, specifically activates dormancy programs in malignant cells. NR2F1 agonist 1 up-regulates NR2F1 and downstream target genes that regulate dormancy. NR2F1 agonist 1 induces neural crest-like and growth suppression in head and neck squamous cell carcinoma (HNSCC) via NR2F1 activation. NR2F1 agonist 1 inhibits tumor growth in a mouse primary tumor model ^[1] . |
| In Vitro | NR2F1 agonist 1 (compound C26) (0.5 μM, 1 μM; 18 h) significantly induces luciferase expression in D-HEp3 cells ^[1] . NR2F1 agonist 1 (0.5 μM; 7 d) significantly down-regulates the phosphoinositide 3-kinase (PI3K) signaling pathway ^[1] . NR2F1 agonist 1 (0.5 μM; 7 d) significantly up-regulates mRNA levels of SOX9, RARβ, and p27 ^[1] . NR2F1 agonist 1 (0.5 μM; 48 h) induces cell cycle arrest at G0/G1 in D-HEp3 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |
| In Vivo | NR2F1 agonist 1 (0.5 mg/kg/day; i.p.; 3 weeks) inhibits primary tumor growth and metastatic growth in lungs in mouse models ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |
| Animal Model: | BALB/c nu/nu mice bearing GFP-tagged T-HEp3 PDX cells ^[1] |
| Dosage: | 0.5 mg/kg/day |
| Administration: | Intraperitoneal injection; injected for 3 weeks or for 1 week followed by DMSO for 2 weeks |
| Result: | Did not induce apoptosis of proliferating primary tumor cells, but exhibited metastasis inhibitory effect against T-HEp3 cells. |

REFERENCES

[1]. Khalil BD, et al. An NR2F1-specific agonist suppresses metastasis by inducing cancer cell dormancy. J Exp Med. 2022 Jan 3;219(1):e20210836.

Caution: Product has not been fully validated for medical applications. For research use only.

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