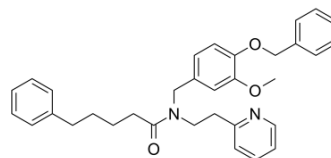


## MCP110

|                           |   |       |          |
|---------------------------|---|-------|----------|
| <b>Cat. No.:</b>          | HY-123673   |       |          |
| <b>CAS No.:</b>           | 521310-51-0   |       |          |
| <b>Molecular Formula:</b> | C <sub>33</sub> H <sub>36</sub> N <sub>2</sub> O <sub>3</sub> |       |          |
| <b>Molecular Weight:</b>  | 508.65  |       |          |
| <b>Target:</b>            | Ras; Raf  |       |          |
| <b>Pathway:</b>           | GPCR/G Protein; MAPK/ERK Pathway                              |       |          |
| <b>Storage:</b>           | Pure form   | -20°C | 3 years  |
|                           |   | 4°C   | 2 years  |
|                           | In solvent  | -80°C | 6 months |
|                           |   | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

|   |   |                          |           |            |
|---|---|--------------------------|-----------|------------|
| <b>In Vitro</b>   | DMSO : 250 mg/mL (491.50 mM; Need ultrasonic)   |                          |           |            |
|   |   | Solvent<br>Concentration | Mass      |            |
|   |   |                          | 1 mg      | 5 mg       |
|   |   |                          | 10 mg     |            |
| <b>Preparing Stock Solutions</b>  | <b>1 mM</b>   | 1.9660 mL                | 9.8299 mL | 19.6599 mL |
|   | <b>5 mM</b>   | 0.3932 mL                | 1.9660 mL | 3.9320 mL  |
|   | <b>10 mM</b>  | 0.1966 mL                | 0.9830 mL | 1.9660 mL  |
| Please refer to the solubility information to select the appropriate solvent. |   |                          |           |            |
| <b>In Vivo</b>  | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: ≥ 2.08 mg/mL (4.09 mM); Clear solution<br><br>2. Add each solvent one by one: 10% DMSO >> 90% corn oil<br>Solubility: ≥ 2.08 mg/mL (4.09 mM); Clear solution |                          |           |            |

### BIOLOGICAL ACTIVITY

|                                     |   |     |
|-------------------------------------|---|-----|
| <b>Description</b>                  | MCP110 is an inhibitor of Ras/Raf-1 interaction. MCP110 blocks the interaction of Ras with Raf. MCP110 disrupts this interaction might can be used for the research of human tumors <sup>[1]</sup> .  |     |
| <b>IC<sub>50</sub> &amp; Target</b> | Ras   | RAF |
| <b>In Vitro</b>                     | MCP110 (10 and 20 μM) inhibits H-Ras (V12)-induced AP-1 activation in HEK293 cells. Ras stimulation of Raf-1 activity is significantly decreased by MCP110 (20 μM) <sup>[1]</sup> .<br>MCP110 (1, 2, 5, 10, and 20 μM) shows a dose-dependent inhibition of elevated Raf-1 activity in fibrosarcoma HT1080 cells <sup>[1]</sup> .<br>MCP110 (20 μM) decreases cyclin D level stimulated by the treatment with EGF (100 ng/mL), platelet-derived growth factor (20 ng/mL), serum, or phorbol 12-myristate 13-acetate (100 nM) in A549 cells <sup>[1]</sup> . |     |

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

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## REFERENCES

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[1]. Juran Kato-Stankiewicz, et al. Inhibitors of Ras/Raf-1 Interaction Identified by Two-Hybrid Screening Revert Ras-dependent Transformation Phenotypes in Human Cancer Cells. Proc Natl Acad Sci U S A. 2002 Oct 29;99(22):14398-403.

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

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