

## Colletofragarone A2

## Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 181377-06-0   |
| Formula:          | C <sub>22</sub> H <sub>26</sub> O <sub>6</sub>  |
| Molecular Weight: | 386.44  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |

## Biological Description

|               |   |
|---------------|---|
| Description   | Colletofragarone A2, isolated from the fungus Colletotrichum sp. (13S020), exhibits anti-cancer activity by inhibiting mutant p53 and HSP90. It promotes the degradation and aggregation of mutant p53, in turn suppressing tumor growth in vivo [1].   |
| Targets(IC50) | Others,HSP,MDM-2/p53  |
| In vitro      | Colletofragarone A2 exhibits selective cytotoxicity towards cells harboring p53 R175H structural mutants, displaying higher efficacy than against other p53 variants, such as DNA-contact mutants, wild-type, or null p53 cells (0.05-5 $\mu$ M; 72 h). It effectively reduces mutant p53 levels by facilitating its degradation in SK-BR-3 cells with the p53 R175H mutation (2 $\mu$ M; 8 h). Furthermore, when combined with MG-132 (10 $\mu$ M), Colletofragarone A2 induces the accumulation of aggregated mutant p53 at concentrations of either 2 or 4 $\mu$ M over 4 hours. |
| In vivo       | Colletofragarone A2, administered intratumorally at 0.35 mM and 100 $\mu$ L daily for 13 days, significantly reduces tumor growth in mice inoculated with HuCCT1 cells harboring the p53 R175H mutation [1].  |

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 2.5877 mL | 12.9386 mL | 25.8772 mL |
| 5 mM  | 0.5175 mL | 2.5877 mL  | 5.1754 mL  |
| 10 mM | 0.2588 mL | 1.2939 mL  | 2.5877 mL  |
| 50 mM | 0.0518 mL | 0.2588 mL  | 0.5175 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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