

## AMG-208

## Chemical Properties

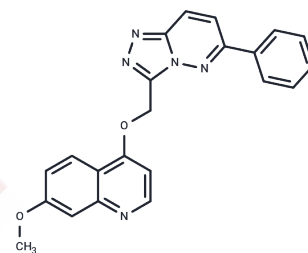
CAS No. : 1002304-34-8

Formula: C<sub>22</sub>H<sub>17</sub>N<sub>5</sub>O<sub>2</sub>

Molecular Weight: 383.4

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## Biological Description

|                            |   |
|----------------------------|---|
| Description                | AMG-208 is a highly selective c-Met inhibitor with IC <sub>50</sub> of 9 nM. Phase 1.   |
| Targets(IC <sub>50</sub> ) | c-Met/HGFR,Cytochromes P450   |
| In vitro                   | AMG-208 shows the potent inhibition of kinase c-Met activity with IC <sub>50</sub> of 9 nM in a cell-free assay. Besides, AMG-208 treatment also leads to the inhibition of HGF-mediated c-Met phosphorylation in PC3 cells with IC <sub>50</sub> of 46 nM. [1] Incubation of AMG-208 with rat and human liver microsomes in the presence of NADPH qualitatively yields C6-phenylarene oxidation products as the major metabolites. [1] Pre-incubation of AMG-208 with human liver microsomes for 30 minutes shows a potent time-dependent inhibition for CYP3A4 metabolic activity with IC <sub>50</sub> of 4.1 μM, which is an eightfold decrease relative to the IC <sub>50</sub> (32 μM) without preincubation. [2] AMG-208 is identified to be a c-MET and RON dual selective inhibitor. [3] |
| In vivo                    | In male Sprague-Dawley rats, AMG-208 (0.5 mg/kg i.v.) shows a high bioavailability with Cl of 0.37 L/h/kg, V <sub>ss</sub> of 0.38 L/kg and T <sub>1/2</sub> of 1 hour, while AMG-208 (2 mg/kg i.v.) shows a bioavailability with AUC <sub>0→∞</sub> of 2517 ng·h/mL and F of 43%, respectively. [1]  |

## Solubility Information

|            |   |
|------------|---|
| Solubility | DMSO: 2.5 mg/mL (6.52 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

### Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 2.6082 mL | 13.0412 mL | 26.0824 mL |
| 5 mM  | 0.5216 mL | 2.6082 mL  | 5.2165 mL  |
| 10 mM | 0.2608 mL | 1.3041 mL  | 2.6082 mL  |
| 50 mM | 0.0522 mL | 0.2608 mL  | 0.5216 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.

### Reference

- Albrecht BK, et al. J Med Chem. 2008, 51(10), 2879-2882.  
Boezio AA, et al. Bioorg Med Chem Lett. 2009, 19(22), 6307-6312.  
Liu X, et al. Trends Mol Med. 2010,16(1), 37-45.

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