

## Product Specification Sheet

**Product Name:** AGI-5198 (IDH-C35)

**Catalog Number:** C2519

**Technical information:**

Chemical Formula:  $C_{27}H_{31}FN_4O_2$

CAS #: 1355326-35-0

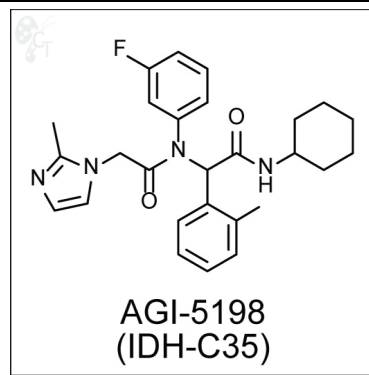
Molecular Weight: 462.56

Purity: > 98%

Appearance: White solid

Solubility: Soluble in DMSO up to 25 mM

Chemical Name: N-cyclohexyl-2-(N-(3-fluorophenyl)-2-(2-methyl-1H-imidazol-1-yl)acetamido)-2-(o-tolyl)acetamide



**Storage:** For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

**Shelf Life:** In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

**Handling:** • To make 10 mM stock solution, add 0.216mL of DMSO for each mg of AGI-5198 (IDH-C35).

- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** AGI-5198 (IDH-C35) is a potent and selective isocitrate dehydrogenase 1 (IDH1) inhibitor specifically against R132H/C mutants (mIDH1) with IC50 at 100 nM range. AGI-5198 does not inhibit wild-type IDH1 or any of the examined IDH2 isoforms (IC50 > 100 μM).[1] AGI-5198 inhibits R-2-hydroxyglutarate (R-2HG) production by mIDH1. AGI-5198 also induces demethylation of histone H3K9me3 and expression of genes associated with gliogenic differentiation.

In both in vitro and in vivo studies, AGI-5198 inhibited the growth of glioma cells carrying mutated but not wild type IDH1, yet with no appreciable changes in genome-wide DNA methylation. These data suggest that mIDH1 may promote glioma growth through mechanisms beyond its well-characterized epigenetic effects. AGI-5198 could serve as a very useful chemical tool to probe the mechanism and treatment of mIDH1-carrying tumors

**Reference:** 1. Rohle D, et al. An inhibitor of mutant IDH1 delays growth and promotes differentiation of glioma cells. Science. 2013; 340(6132):626-30. Pubmed ID: 23558169

To reorder: <http://www.cellagentech.com/AGI-5198-IDH-C35/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*