

Product Specification Sheet

Product Name: PHA-665752

Catalog Number: C7665

Technical information:

Chemical Formula: C₃₂H₃₄Cl₂N₄O₄S

CAS #: 477575-56-7

Molecular Weight: 641.61

Purity: > 98%

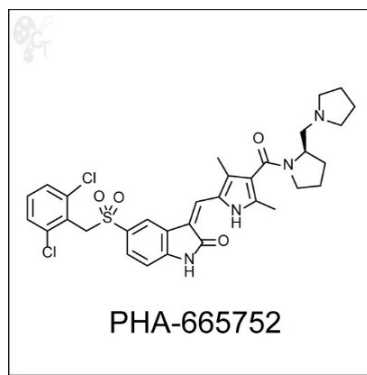
Appearance: Yellow solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: (R,Z)-5-(2,6-dichlorobenzylsulfonyl)-3-((3,5-dimethyl-4-(2-(pyrrolidin-1-ylmethyl)pyrrolidine-1-carbonyl)-1H-pyrrol-2-yl)methylene)indolin-2-one

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

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 0.156mL of DMSO for each mg of PHA-665752.
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: PHA-665752 is an oxindole-based, ATP-competitive c-Met and Ron inhibitor with IC₅₀ potencies of 9 nM, and 68 nM, respectively. [1] It is >50-fold selective compared to a broad panel of both tyrosine and serine-threonine kinases. In cellular studies, PHA-665752 inhibits HGF-stimulated and constitutive c-Met phosphorylation as well as downstream signal transduction mediators such as Gab-1, Akt, phospholipase C gamma, and focal adhesion kinase. Inhibition of c-Met phosphorylation is dose-dependent and correlates well with tumor growth inhibition.

PHA-665752 induced apoptosis and cell cycle arrest in BaF3.TPR-MET cells at an IC₅₀ of 60 nM. [2] Additionally, PHA-665752 has been suggested to inhibit lung tumorigenesis in mutant K-Ras mice and may be a formidable treatment for NSCLC. [3]

- Reference:**
1. Christensen et al., A selective small molecule inhibitor of c-Met kinase inhibits c-Met-dependent phenotypes in vitro and exhibits cytoreductive antitumor activity in vivo. *Cancer Res.* 2003, 63, 7345-7355. Pubmed ID: 14612533
 2. Ma et al., A selective small molecule c-MET Inhibitor, PHA665752, cooperates with rapamycin. *Clin. Cancer Res.* 2005, 11, 2312-2139 Pubmed ID: 15788682
 3. Yang et al., A selective small molecule inhibitor of c-Met, PHA-665752, reverses lung premalignancy induced by mutant K-ras. *Mol. Cancer Ther.* 2008, 7, 952-960. Pubmed ID: 18413809

To reorder: <http://www.cellagentech.com/PHA-665752/>

For Technical Support: technical@cellagentech.com

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