

## **Data Sheet**

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 Product Name
 :
 GSK-2656157

 Cat. No.
 :
 PC-49643

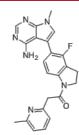
 CAS No.
 :
 1337532-29-2

 Molecular Formula
 :
 C<sub>23</sub>H<sub>21</sub>FN<sub>6</sub>O

 Molecular Weight
 :
 416.45

 Target
 :
 PERK

**Solubility** : 10 mM in DMSO



## **Biological Activity**

GSK2656157 (GSK 2656157) is a potent, selective and ATP-competitive inhibitor of **PERK** with biochemical IC50 of 0.9 nM and cellular p-PERK IC50 of 30 nM.

GSK2656157 shows selectivity (>500-fold) over HRI, PKR, and GCN2, other members of the EIF2AK family, and high IC50 values (>100 nM) against a panel of 300 kinases.

GSK2656157 inhibits stress-induced PERK autophosphorylation, eIF2 $\alpha$  substrate phosphorylation, together with corresponding decreases in ATF4 and CAAT/enhancer binding protein homologous protein (CHOP) in multiple cell lines. Oral administration of GSK2656157 to mice shows a dose- and time-dependent pharmacodynamic response in pancreas as measured by PERK autophosphorylation.

GSK2656157 exhibited antitumor effect in multiple human tumor xenografts growth in mice.

## References

Atkins C, et al. *Cancer Res*. 2013 Mar 15;73(6):1993-2002. Krishnamoorthy J, et al. *Cell Cycle*. 2014;13(5):801-6.

Axten JM, et al. **ACS Med Chem Lett**. 2013 Aug 12;4(10):964-8.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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