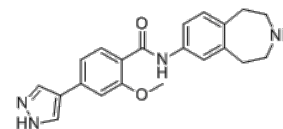


**Product Name** : MELK-T1  
**Cat. No.** : PC-70140  
**CAS No.** : 1610586-62-3  
**Molecular Formula** : C<sub>21</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub>  
**Molecular Weight** : 362.433  
**Target** : MELK  
**Solubility** : 10 mM in DMSO



## Biological Activity

MELK-T1 (JNJ-47117096) is a cell-permeable, potent and selective inhibitor of **MELK** kinase domain with IC<sub>50</sub> of 37 nM. MELK-T1 (JNJ-47117096) shows >50% inhibition at 1 μM against 6 kinases in a panel of 235 kinases (Flt3 IC<sub>50</sub>=18 nM). MELK-T1 (JNJ-47117096) triggers a rapid and proteasome-dependent degradation of the MELK protein, induces the accumulation of stalled replication forks and DSBs in MCF-7 cells. MELK-T1 (JNJ-47117096) induces a strong phosphorylation of p53, a prolonged up-regulation of p21 and a down-regulation of FOXM1 target genes.

## References

- Beke L, et al. *Biosci Rep.* 2015 Oct 2;35(6). pii: e00267.  
Johnson CN, et al. *ACS Med Chem Lett.* 2014 May 23;6(1):25-30.

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

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