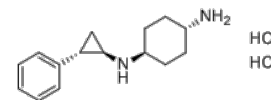


**Product Name** : ORY-1001 dihydrochloride  
**Cat. No.** : PC-35458  
**CAS No.** : 1431303-72-8  
**Molecular Formula** : C<sub>15</sub>H<sub>24</sub>Cl<sub>2</sub>N<sub>2</sub>  
**Molecular Weight** : 303.271  
**Target** : Histone Demethylase  
**Solubility** : 10 mM in DMSO



### Biological Activity

ORY-1001 dihydrochloride (RG6016, Ladademstat) is a highly potent, selective inhibitor of lysine-specific demethylase KDM1A (**LSD1**) with IC<sub>50</sub> of 18 nM, displays high selectivity for KDM1A over other FAD-containing monoamine oxidases. ORY-1001 exhibits low nanomolar cellular activity (EC<sub>50</sub> < 1 nM) in the THP1 differentiation assay and induces the CD11b marker within 6 hr of treatment in FACS based differentiation assay in THP1 cell line.

ORY-1001 induces H3K4me2 accumulation on KDM1A target genes, blast differentiation, and reduction of leukemic stem cell capacity in AML.

ORY-1001 exhibits potent synergy with standard-of-care drugs and selective epigenetic inhibitors, reduces growth of AML xenograft models.

### References

Maes T, et al. *Cancer Cell*. 2018 Mar 12;33(3):495-511.e12.

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

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