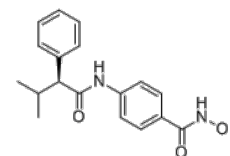


**Product Name** : AR-42  
**Cat. No.** : PC-60407  
**CAS No.** : 935881-37-1  
**Molecular Formula** : C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>  
**Molecular Weight** : 312.36  
**Target** : HDAC  
**Solubility** : 10 mM in DMSO



## Biological Activity

AR-42 (HDAC-42, OSU-HDAC42, NSC-D736012) is a potent **pan-HDAC** inhibitor with IC<sub>50</sub> of 16-30 nM, inhibits cell proliferation of P815, C2, and BR cells with IC<sub>50</sub> of 0.65, 0.30, and 0.23 μM, respectively.

AR-42 promotes hyperacetylation of H3, H4, and α-tubulin, and up-regulation of p21, also down-regulates the expression of p-Akt, total Akt, pSTAT3/5, and total STAT3/5.

AR-42 increases response to decitabine treatment via upregulation of miR-29b.

AR-42 prolongs survival in an ATL NOD/SCID mouse model.

## References

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Sargeant AM, et al. *Cancer Res*. 2008 May 15;68(10):3999-4009.

Mims A, et al. *Leukemia*. 2013 Apr;27(4):871-8.

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

E-mail: tech@probechem.com