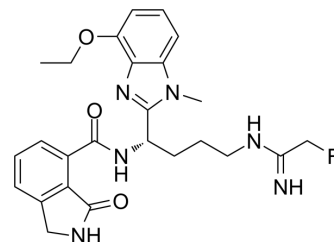


## AFM32a

Cat. No.:	HY-136557
CAS No.:	2095109-82-1
Molecular Formula:	C <sub>25</sub> H <sub>29</sub> FN <sub>6</sub> O <sub>3</sub>
Molecular Weight:	480.53
Target:	Protein Arginine Deiminase
Pathway:	Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	AFM32a (PAD2-IN-1), a benzimidazole-based derivative, is a potent and selective protein arginine deiminase 2 (PAD2) inhibitor. AFM32a shows superior selectivity for PAD2 over PAD4 (95-fold) and PAD3 (79-fold) <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Protein Arginine Deiminase 2 (PAD2) <sup>[1]</sup>
<b>In Vitro</b>	In the target engagement assay, the EC <sub>50</sub> of AFM32a (compound 32a) is 8.3 μM in HEK293T/PAD2 cells, the enhanced potency of AFM32a overcomes its relatively poor ability to enter cells <sup>[1]</sup> . AFM32a (compound 32a; 1-25 μM) treatment strongly inhibits histone H3 citrullination with an EC <sub>50</sub> of 2.7 μM in HEK293T/PAD2 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Front Immunol. 01 December 2021.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

[1]. Aaron Muth, et al. Development of a Selective Inhibitor of Protein Arginine Deiminase 2. J Med Chem. 2017 Apr 13;60(7):3198-3211.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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