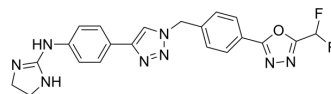


## ITF5924

Cat. No.:	HY-161306
CAS No.:	2760854-72-4
Molecular Formula:	C <sub>21</sub> H <sub>18</sub> F <sub>2</sub> N <sub>8</sub> O
Molecular Weight:	436.42
Target:	HDAC
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

Description	ITF5924 (compound 1) is a potent and highly selective HDAC6 inhibitor with an IC <sub>50</sub> of 7.7 nM. ITF5924 shows greater than 104-fold selectivity for HDAC6 over all other HDAC subtypes. ITF5924 containing a difluoromethyl-1,3,4-oxadiazole (DFMO) moiety is slow-binding substrate analog of HDAC6 that undergo an enzyme-catalyzed ring opening reaction, forming a tight and long-lived enzyme-inhibitor complex <sup>[1]</sup> .
IC <sub>50</sub> & Target	HDAC6 7.7 nM (IC <sub>50</sub> )

## REFERENCES

[1]. Edoardo Cellupica, et al. Difluoromethyl-1,3,4-oxadiazoles are slow-binding substrate analog inhibitors of histone deacetylase 6 with unprecedented isotype selectivity. J Biol Chem. 2023 Jan;299(1):102800.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA