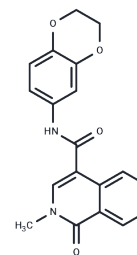


CeMMEC1

Chemical Properties

CAS No. :	440662-09-9
Formula:	C ₁₉ H ₁₆ N ₂ O ₄
Molecular Weight:	336.34
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	CeMMEC1 is an inhibitor of BRD4, and also has a great affinity for TAF1 (IC ₅₀ =0.9 μM).
Targets(IC ₅₀)	Epigenetic Reader Domain, Carboxypeptidase, DNA/RNA Synthesis
In vitro	CeMMEC1 exhibits high affinity activity for the bromodomains of CREBBP, EP300, BRD9 and the second bromodomain of TAF1.
Kinase Assay	TAF1 binding assays are conducted using the EPIgeneous Binding Domain kit B. Binding is determined by the displacement of an acetylated biotin peptide from a GST-tagged TAF1 protein using HTRF with a Eu ³⁺ -conjugated GST antibody donor and streptavidin-conjugated acceptor. Compounds (CeMMEC1) are dispensed into assay plates, ProxiPlate-384 Plus using an Echo 525 Liquid Handler. Binding assays are conducted in a final volume of 20 μL with 5 nM TAF1-GST, 50 nM peptide (SGRGK (ac)GGK (ac)GLGK (ac)GGAK (ac)RHRK (biotin)-acid), 6.25 nM Streptavidin-XL665, 1:200 Anti-GST-Eu ³⁺ cryptate and 0.1% DMSO. Assay reagents are dispensed into plates using a Multidrop combi and incubated at room temperature for 3 h. Fluorescence is measured using a PHERAstar microplate reader using the HTRF module with dual emission protocol (A = excitation of 320 nm, emission of 665 nm, and B = excitation of 320 nm, emission of 620 nm). Raw data are processed to give an HTRF ratio (channel A/B × 10,000), which is used to generate IC ₅₀ curves
Cell Research	REDS3 cells were treated with CeMMEC1 (10 μM) incubating for 24 hours.

Solubility Information

Solubility	DMSO: 5.63 mg/mL (16.72 mM), Sonication is recommended. (< 1 mg/mL refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9732 mL	14.8659 mL	29.7318 mL
5 mM	0.5946 mL	2.9732 mL	5.9464 mL
10 mM	0.2973 mL	1.4866 mL	2.9732 mL
50 mM	0.0595 mL	0.2973 mL	0.5946 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Sdelci S,etal. Mapping the chemical chromatin reactivation landscape identifies BRD4-TAF1 cross-talk.Nat Chem Biol. 2016 Jul;12(7):504-10.

Xing Y, Huang D, Lin P, et al.Salvianolic acid C promotes renal gluconeogenesis in fibrotic kidneys through PGC1α. Biochemical and Biophysical Research Communications.2024: 151174.