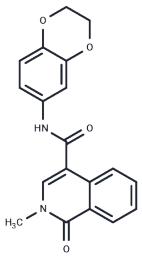
# Data Sheet (Cat.No.T4345)

TargetMol

## CeMMEC1

### Chemical Properties



CAS No. : 440662-09-9

Formula: C19H16N2O4

Molecular Weight: 336.34

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | CeMMEC1 is an inhibitor of BRD4, and also has a great affinity for TAF1(IC50=0.9 μM). |
| Targets(IC50) | 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 Eu3+-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-Eu3+ 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, emmission 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 IC50 curves |
| Cell Research | REDS3 cells were treated with CeMMEC1(10 μM) incubating for 24 hours. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 5.63 mg/mL (16.74 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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.