

Product Name	: CPYPP
Synonyms	: —
Cat No.	: M22074
CAS Number	: 310460-39-0
Molecular Formula	: C ₁₈ H ₁₃ ClN ₂ O ₂
Formula Weight	: 324.76
Chemical Name	: —
Description	<p>CPYPP is an inhibitor of DOCK2-Rac1 interaction. CPYPP binds to DOCK2 DHR-2 domain and inhibits the guanine nucleotide exchange factor (GEF) activity of DOCK2DHR-2 for Rac1 in a dose-dependent manner (IC₅₀ : 22.8 μM). CPYPP also inhibits DOCK180, DOCK5 and less DOCK9. CPYPP as a small-molecule inhibitor of DOCK2. CPYPP bound to DOCK2 DHR-2 domain in a reversible manner and inhibited its catalytic activity in vitro. When lymphocytes were treated with CPYPP, both chemokine receptor- and antigen receptor-mediated Rac activation were blocked, resulting in marked reduction of chemotactic response and T cell activation. These results provide a rational of and a chemical scaffold for development of the DOCK2-targeting immunosuppressant.</p>
Pathway	: Others
Target	: Other Targets
Receptor	: DOCK2-Rac1; DOCK180; DOCK5; DOCK9
Solubility	: DMSO : 23 mg/mL (70.82 mM); Need ultrasonic
SMILES	: <chem>ClC1=CC=CC=C1C=CC=C1C(=O)NN(C1=O)C1=CC=CC=C1</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Nishikimi A, et al. Blockade of inflammatory responses by a small-molecule inhibitor of the Rac activator DOCK2. Chem Biol. 2012 Apr 20; 19(4):488-97.