Web: www.taiclone.com
Tel: +886-2-2735-9682
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# CC0651

## Catalog No: tcsc2109

### Available Sizes

**Size:** 1mg

**Size:** 5mg

**Size:** 10mg

### Specifications

**CAS No:**
1319207-44-7

**Formula:**
$C_{20}H_{21}Cl_2NO_6$

**Pathway:**
Metabolic Enzyme/Protease

**Target:**
E1/E2/E3 Enzyme

**Purity / Grade:**
>98%

**Solubility:**
DMSO : ≥ 56 mg/mL (126.61 mM)

**Observed Molecular Weight:**
442.29

## Product Description

CC0651 is an allosteric inhibitor of the human **Cdc34 ubiquitin-conjugating enzyme**. CC0651 potently (**$IC_{50}$**=1.72 μM) inhibits the ubiquitination of $p27^{Kip1}$, as confirmed by dose-response analysis.

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IC50 & Target: IC50: 1.72 μM ($p27^{Kip1}$ ubiquitination)[1]

***In Vitro:*** CC0651 strongly impairs the rate of ubiquitin chain initiation on substrate by $SCF^{Cdc4}$, as measured by the monoubiquitination of Sic1 by K0 ubiquitin. CC0651 actually potentiates the formation of both ubiquitin dimers and monoubiquitinated hCdc34, concordant with the observed accumulation of the hCdc34 conjugate in cells treated with the ester derivative of CC0651. CC0651 completely inhibits the assembly of polyubiquitin chains and decreased formation of free triubiquitin and, to a lesser extent, hCdc34 monoubiquitin, but has no effect on production of diubiquitin[1]. CC0651 is an inhibitor of the E2 ubiquitin conjugating enzyme Cdc34A, acts by trapping a weak interaction between ubiquitin and the E2 donor ubiquitin binding site. A quantitative SCF ubiquitination assay with a β-Catenin substrate peptide yields a value of $IC_{50}$ of 18±1 μM for CC0651 inhibition, similar to the effective concentrations observed in the NMR and TR-FRET assays[2].