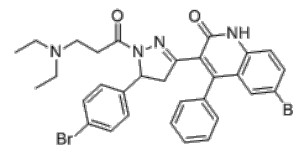


Product Name : CCT020312
Cat. No. : PC-35976
CAS No. : 324759-76-4
Molecular Formula : C₃₁H₃₀Br₂N₄O₂
Molecular Weight : 650.415
Target : PERK
Solubility : 10 mM in DMSO



Biological Activity

CCT020312 (CCT-020312) is a small molecule **PERK activator**, inhibits pRB phosphorylation in HT29 colon carcinoma cells with EC₅₀ of 5.1 uM.

CCT020312 shows no effect on the activity on CDK4/cyclin D or CDK1/cyclin B, effectively inhibits cell proliferation of HT29 colon carcinoma cells with IC₅₀ of 3.1 uM (96 h).

CCT020312 elicits EIF2A phosphorylation in cells, does not induce full ER stress signalling; also reduced tau phosphorylation, tau conformational change and 4-repeat tau isoforms, and increased cell viability in cultured human neurons.

CCT020312 significantly improved memory and locomotor function, reduced tau pathology, and prevented dendritic spine and motoneuron loss in P301S tau mice.

References

Stockwell SR, et al. *PLoS One*. 2012;7(1):e28568. doi: 10.1371/journal.pone.0028568.

Bruch J, et al. *EMBO Mol Med*. 2017 Mar;9(3):371-384.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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