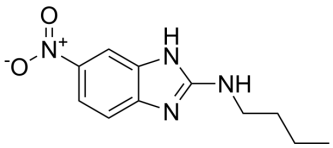
AV123

Cat. No.:	HY-151369
CAS No.:	233605-81-7
Molecular Formula:	$C_{11}H_{14}N_4O_2$
Molecular Weight:	234.25
Target:	RIP kinase
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	AV123 (compound 12) is a non-cytotoxic RIPK1 inhibitor (IC_{50}=12.12 μM). AV123 blocks the TNF-α-induced necroptotic (EC_{50} =1.7 μM) but not the apoptotic cell death. AV123 can be used in the study of necrotic chronic conditions such as ischemia-reperfusion injury of the brain, heart and kidney, inflammatory diseases, neurodegenerative diseases and infectious diseases[1].
IC_{50} & Target	IC50: 0.48 μM (CDK9/ CyclinT), 0.80 μM (CLK1 of Mus musculus), 1.80 μM (DYRK1A of Rattus norvegicus), >10 μM (CDK2/CyclinA, CDK5/p25, HASPIN, Pim1, CK1 ε, JAK3, ABL1, RIPK3, AURKB)[1].

In Vitro

AV123 (0.01-100 μM; 24 h) efficiently blocks necroptosis in a dose-dependent manner in FADD-deficient Jurkat cells[1].
AV123 (0.01-50 μM; 24 h) shows no toxicity to RPE-1 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	FADD-deficient Jurkat cells
Concentration:	0.01-100 μM
Incubation Time:	24 h
Result:	Significantly blocked the necroptotic cell-death induced by TNF-α with an EC_{50} value of 1.7 μM.

Cell Cytotoxicity Assay[1]

Cell Line:	RPE-1 cells
Concentration:	0.01-50 μM
Incubation Time:	24 h
Result:	Exhibited no toxicity to RPE-1 cells.

REFERENCES

[1]. Benchekroun M, et al. Discovery of simplified benzazole fragments derived from the marine benzosceptrin B as necroptosis inhibitors involving the receptor interacting protein Kinase-1. Eur J Med Chem. 2020 Sep 1;201:112337.

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