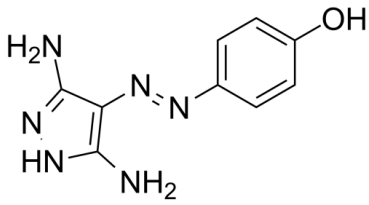
Data Sheet

Product Name:	CAN508
Cat. No.:	CS-0018885
CAS No.:	140651-18-9
Molecular Formula:	$C_9H_{10}N_6O$
Molecular Weight:	218.22
Target:	CDK
Pathway:	Cell Cycle/DNA Damage
Solubility:	DMSO : 250 mg/mL (1145.63 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

CAN508 is a potent, ATP-competitive **CDK9/cyclin T1** inhibitor with an **IC_{50}** of 0.35 μM. CAN508 exhibits a 38-fold selectivity for CDK9/cyclin T over other CDK/cyclin complexes. Antitumor activity[1][2]. **In Vitro:** CAN508 reduces the frequency of S-phase cells of the cancer cell line HT-29 in antiproliferation assays[1].

CAN508 (20-40 μM; 72 hours) significantly reduces cell proliferation in a dose dependent manner in all three esophageal adenocarcinoma cell lines (SKGT4, OE33 and FLO-1 cells) with IC_{50}s ranging from 34.99 to 91.09 μM[2].

CAN508 (40 μM; 72 hours) increases apoptosis in all three esophageal adenocarcinoma cells[2]. **In Vivo:** CAN508 (60 mg/kg; i.p.; daily for 10 days) has antitumor effects in esophageal adenocarcinoma xenografts[1].

References:

[1]. Krystof V, et al. 4-arylazo-3,5-diamino-1H-pyrazole CDK inhibitors: SAR study, crystal structure in complex with CDK2, selectivity, and cellular effects. J Med Chem. 2006;49(22):6500-6509.

[2]. Tong Z, et al. Antitumor effects of cyclin dependent kinase 9 inhibition in esophageal adenocarcinoma. Oncotarget. 2017;8(17):28696-28710.

CAIndexNames:

Phenol, 4-[2-(3,5-diamino-1H-pyrazol-4-yl)diazenyl]-

SMILES:

OC1=CC=C(/N=N/C2=C(N)NN=C2N)C=C1

Tel: 610-426-3128 Fax: 888-484-5008 E-mail: sales@ChemScene.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA