

## **Cdk9 Inhibitor II**

09/19

ALTERNATE NAMES: CAY10574; UNII-ZG0O47K626; ZG0O47K626; CAN508; 4-(3,5-Diamino-1H-pyrazol-4-ylazo)-phenol; 4-

[(3,5-diamino-1H-pyrazol-4-yl)diazenyl]phenol; 3,5-diamino-4-(4-hydroxyphenyl)azopyrazole; 4-Arylazo-

3,5-diamino-1H-pyrazole 31b

**CATALOG #:**B2903-1 1 mg
B2903-5 5 mg

STRUCTURE:

MOLECULAR FORMULA:  $C_9H_{10}N_6O$ 

MOLECULAR WEIGHT: 218.22

**CAS NUMBER:** 140651-18-9

APPEARANCE: A crystalline solid

PURITY: ≥95%

**SOLUBILITY:** ~0.5 mg/ml in DMSO and DMF

**DESCRIPTION:** Cdk9 Inhibitor II is a potent and selective inhibitor of Cdk9 with an IC<sub>50</sub> value of 0.35 μM *in vitro*. It is

also an inhibitor of Cdk2-cyclin E with respect to ATP, with  $K_i$  and  $IC_{50}$  values of 13.3  $\mu$ M and 20  $\mu$ M respectively. It reduces the frequency of S-phase cells in the cancer cell line HT-29 and decreases the phosphorylation of the retinoblastoma protein and the C-terminal domain of RNA polymerase II. It inhibits mRNA synthesis and induces the tumor suppressor protein p53. It inhibits cell proliferation of cancer cell lines such as MCF-7, HOS, G361, and K562 cells with  $IC_{50}$  values of 33  $\mu$ M, 49  $\mu$ M, 64  $\mu$ M,

and 62  $\mu M$  respectively.

**STORAGE TEMPERATURE:** -20°C. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of

exposure.

**REFERENCE:** Krystof, V., Cankar, P., Frysová, I., et al. 4-Arylazo-3,5-diamino-1H-pyrazole CDK inhibitors: SAR study,

crystal structure in complex with CDK2, selectivity, and cellular effects. Journal of Medicinal Chemistry

49, 6500-6509 (2006).

**RELATED PRODUCTS:** 

ABC-1183 (Cat. No. B2221) PHA-767491(HCl) (Cat. No. B1639) Dinaciclib (Cat. No. 9537) AZD-5438 (Cat. No. B2073) Riviciclib hydrochloride (Cat. No. B2567)

DISCLAIMER: FOR RESEARCH USE ONLY! Not to be used on humans.