

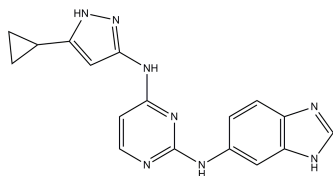
PRODUCT: APY29

ALTERNATE NAME: *N*²-1*H*-Benzimidazol-6-yl-*N*²-(5-cyclopropyl-1*H*-pyrazol-3-yl)-2,4-pyrimidinediamine

CATALOG #: 2591-5, 25

AMOUNT: 5 mg, 25 mg

STRUCTURE:



MOLECULAR FORMULA: C₁₇H₁₆N₈

MOLECULAR WEIGHT: 332.36

CAS No. 1216665-49-4

APPEARANCE: White solid

SOLUBILITY: DMSO (>30 mg/ml)

PURITY: ≥98% by HPLC

STORAGE: Store at -20°C. Protect from light and air

DESCRIPTION: APY29 is a highly potent and selective allosteric modulator of IRE1α. Under endoplasmic reticulum (ER) stress, unfolded proteins accumulate in the ER to activate the ER transmembrane kinase/endoribonuclease (RNase)—IRE1α. IRE1α oligomerizes, autophosphorylates, and initiates splicing of XBP1 mRNA, thus triggering the unfolded protein response (UPR). APY29 Inhibits IRE1α autophosphorylation (IC₅₀ = 280 nM) and activates IRE1αRNase activity. As dysregulation of the UPR has been implicated in a variety of cell degenerative and neoplastic disorders, small molecule modulators of IRE1α should be very useful in understanding UPR's role in pathophysiology and to develop drugs for ER stress-related diseases.

REFERENCES: Wang, L., *et al.* (2012). *Nat. Chem. Biol.* **8**, 982-989.

RELATED PRODUCTS:

Sunitinib malate (Sutent) (Cat. No. 1611-25, 100, 1000)

Sunitinib, Free base (Cat. No. 2097-25, 100, 1000)

EZSolution™ Sunitinib Malate (Cat. No. 1804-25)

HANDLING:

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

USAGE:

FOR RESEARCH USE ONLY! Not to be used in humans.