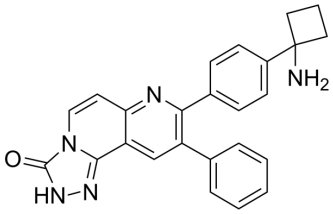
MK-2206 free base

Cat. No.:	HY-10357
CAS No.:	1032349-93-1
Molecular Formula:	$C_{25}H_{21}N_5O$
Molecular Weight:	407.47
Target:	Akt; Autophagy; Apoptosis; Organoid
Pathway:	PI3K/Akt/mTOR; Autophagy; Apoptosis; Stem Cell/Wnt
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	MK-2206 free base is an orally active, highly potent and selective allosteric Akt inhibitor, with IC_{50}s of 8, 12, and 65 nM for Akt1, Akt2, and Akt3, respectively. Many breast cancer cell lines, and PIK3CA-mutant and cell lines with PTEN loss are sensitive to MK-2206 free base. MK-2206 free base has anticancer activities[1][2].		
IC_{50} & Target	Akt1 8 nM (IC_{50})	Akt2 12 nM (IC_{50})	Akt3 65 nM (IC_{50})

CUSTOMER VALIDATION

- Nature. 2018 Aug;560(7719):499-503.
- Cell. 2014 Feb 13;156(4):771-85.
- Science. 2022 Jul 8;377(6602):eabg9302.
- Cancer Cell. 2018 Jun 11;33(6):1061-1077.e6.
- Signal Transduct Target Ther. 2021 Jun 18;6(1):234.

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REFERENCES

[1]. Zhao YY, et al. Effects of an oral allosteric AKT inhibitor (MK-2206) on human nasopharyngeal cancer in vitro and in vivo. Drug Des Devel Ther. 2014 Oct 10;8:1827-37.

[2]. Zhao YY, et al. Effects of an oral allosteric AKT inhibitor (MK-2206) on human nasopharyngeal cancer in vitro and in vivo. Drug Des Devel Ther. 2014 Oct 10;8:1827-37.

[3]. Agarwal E, et al. Akt inhibitor MK-2206 promotes anti-tumor activity and cell death by modulation of AIF and Ezrin in colorectal cancer. BMC Cancer. 2014 Mar 1;14:145.

[4]. Xing Y, et al. Phase II trial of AKT inhibitor MK-2206 in patients with advanced breast cancer who have tumors with PIK3CA or AKT mutations, and/or PTEN loss/PTEN mutation. Breast Cancer Res. 2019 Jul 5;21(1):78.

[5]. Li Yan, et al. Abstract #DDT01-1: MK-2206: A potent oral allosteric AKT inhibitor. 2009.

Caution: Product has not been fully validated for medical applications. For research use only.

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