



LKT Laboratories, Inc.

## MK-2206 Monohydrochloride

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### Product Information

Product ID M4000

CAS No. 1032349-77-1

**Chemical Name**

Synonym MK-2206 hydrochloride

Formula  $C_{25}H_{22}ClN_5O$

Formula Wt. 443.93

Melting Point

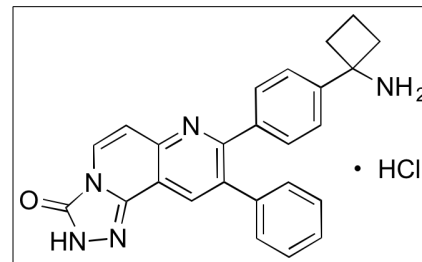
Purity  $\geq 99\%$

Solubility Soluble in DMSO, water with  
1 eq. of acid

Store Temp  $-20^{\circ}C$

Ship Temp Ambient

**Description** MK-2206 is an allosteric inhibitor of Akt that prevents translocation of Akt to membranes. MK-2206 exhibits anticancer chemotherapeutic activity in a variety of in vitro cancer models; this compound induces G1-phase cell cycle arrest in hepatocellular carcinoma cells, inhibits cell proliferation in non-small cell lung cancer cells, and inhibits proliferation in medullary thyroid cancer cells. In animal models of nasopharyngeal cancer, MK-2206 inhibits tumor growth.



**Bulk quantities available upon request**

| Product ID | Size  |
|------------|-------|
| M4000      | 1 mg  |
| M4000      | 5 mg  |
| M4000      | 25 mg |

- References** Zhao YY, Tian Y, Zhang J, 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. PMID: 25336925.
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- Jiao P, Zhou YS, Yang JX, et al. MK-2206 induces cell cycle arrest and apoptosis in HepG2 cells and sensitizes TRAIL-mediated cell death. *Mol Cell Biochem.* 2013 Jun 25. [Epub ahead of print] PMID: 23797319.
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- Iida M, Brand TM, Campbell DA, et al. Targeting AKT with the allosteric AKT inhibitor MK-2206 in non-small cell lung cancer cells with acquired resistance to cetuximab. *Cancer Biol Ther.* 2013 Jun;14(6):481-91. PMID: 23760490.
- Davies BR, Greenwood H, Dudley P, et al. Preclinical pharmacology of AZD5363, an inhibitor of AKT: pharmacodynamics, antitumor activity, and correlation of monotherapy activity with genetic background. *Mol Cancer Ther.* 2012 Apr;11(4):873-87. PMID: 22294718.
- Cheng Y, Zhang Y, Zhang L, et al. MK-2206, a novel allosteric inhibitor of Akt, synergizes with gefitinib against malignant glioma via modulating both autophagy and apoptosis. *Mol Cancer Ther.* 2012 Jan;11(1):154-64. PMID: 22057014.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.