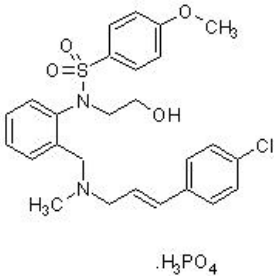


Product datasheet

KN-93 (water soluble), CaMK II inhibitor ab120980

1 References 1 Image

Overview

<b>Product name</b>	KN-93 (water soluble), CaMK II inhibitor
<b>Description</b>	Potent, specific CaMK II inhibitor
<b>Biological description</b>	Potent, specific and cell-permeable calmodulin-dependent protein kinase (CaMK) II inhibitor (IC <sub>50</sub> = 370 nM). Also a potent and direct extracellular open channel voltage-gated potassium channel blocker (IC <sub>50</sub> = 307 nM for Kv1.5); independent of CaM kinase II inhibition. Water soluble.
<b>Purity</b>	> 99%
<b>CAS Number</b>	1188890-41-6
<b>Chemical structure</b>	

Properties

<b>Chemical name</b>	<i>N</i> -[2-[[[(2 <i>E</i> )-3-(4-Chlorophenyl)-2-propen-1-yl]methylamino]methyl]phenyl]- <i>N</i> -(2-hydroxyethyl)-4-methoxybenzenesulfonamide phosphate
<b>Molecular weight</b>	599.03
<b>Molecular formula</b>	C <sub>26</sub> H <sub>29</sub> ClN <sub>2</sub> O <sub>4</sub> S.H <sub>3</sub> PO <sub>4</sub>
<b>PubChem identifier</b>	16760530
<b>Storage instructions</b>	Store at -20°C. It is important to note that this product is reported to be light sensitive. Store In the Dark. Store under desiccating conditions.
<b>Solubility overview</b>	Soluble in water to 100 mM and in DMSO to 100 mM
<b>Handling</b>	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.  Need more advice on solubility, usage and handling? Please visit our <a href="#">frequently asked questions</a>

(FAQ) page for more details.

## SMILES

Clc3ccc(/C=C/CN(C)Cc2ccccc2N(CCO)S(=O)(=O)c1ccc(OC)cc1)cc3.O=P(O)(O)O

## Source

Synthetic

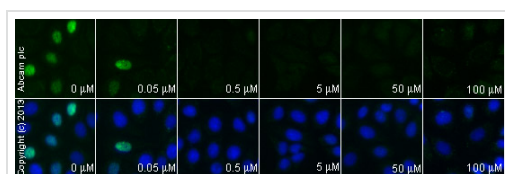
## Applications

Our [Abpromise guarantee](#) covers the use of **ab120980** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

## Images



Functional Studies - KN-93 (water soluble), CaMK II inhibitor (ab120980)

**ab40754** staining cyclin D1 in MCF7 cells treated with KN-93 (water soluble) (ab120980), by ICC/IF. Decrease in cyclin D1 expression correlates with increased concentration of KN-93 (water soluble), as described in literature.

The cells were incubated at 37°C for 24 hours in media containing different concentrations of ab120980 (KN-93 (water soluble)) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab40754** (1/100 dilution) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (**ab96899**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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