# abcam

# Product datasheet

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

# 3 References 2 Images

#### Overview

**Product name** KN-93 (water soluble), CaMK II inhibitor

**Description** Potent, specific CaMK II inhibitor

**Purity** > 99%

**CAS Number** 1188890-41-6

**Chemical structure** 

#### **Properties**

Chemical name N-[2-[[(2E)-3-(4-Chlorophenyl)-2-propen-1-yl]methylamino]methyl]phenyl]-N-(2-hydroxyethyl)-4-

methoxybenzenesulfonamide phosphate

Molecular weight 599.03

**Molecular formula** 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>

PubChem identifier 16760530

Storage instructions 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.

**Solubility overview** Soluble in water to 100 mM and in DMSO to 100 mM

Handling 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 $^{\circ}$ 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 frequently asked

questions (FAQ) page for more details.

 $\textbf{SMILES} \qquad \qquad \text{Clc3ccc}(/\text{C=C/CN(C)Cc2ccccc2N(CCO)S(=O)(=O)c1ccc(OC)cc1)cc3.O=P(O)(O)O}$ 

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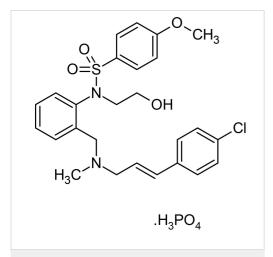
## **Applications**

**The Abpromise guarantee** 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.

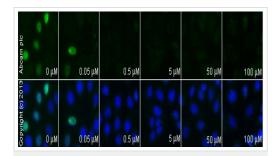
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

#### **Images**



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

2D chemical structure image of ab120980, KN-93 (water soluble), CaMK II inhibitor



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

<u>ab40754</u> 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.

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