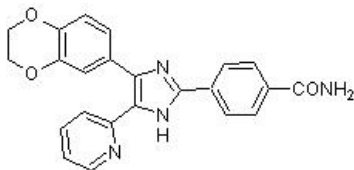


Product datasheet

D4476, CK1 inhibitor ab120220

[6 References](#) [2 Images](#)

Overview

Product name	D4476, CK1 inhibitor
Description	CK1 inhibitor
Biological description	Selective cell-permeable inhibitor of casein kinase 1 (CK1) . (IC ₅₀ values are 0.3 (CK1), 0.5 (ALK5), 9.1 (PK _d 1) and 5.8 μM (p38αMAPK)). Displays selectivity over many other protein kinases.
CAS Number	301836-43-1
Chemical structure	

Properties

Chemical name	4-[4-(2,3-Dihydro-1,4-benzodioxin-6-yl)-5-(2-pyridinyl)-1H-imidazol-2-yl]benzamide
Molecular weight	398.41
Molecular formula	C ₂₃ H ₁₈ N ₄ O ₃
PubChem identifier	6419753
Storage instructions	Store at +4°C. The product can be stored for up to 12 months.
Solubility overview	Soluble in DMSO to 100 mM
Handling	<p>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.</p> <p>Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.</p>
SMILES	NC(=O)c1ccc(cc1)c3nc(c2ccccc2)c(n3)c4ccc5OCCOc5c4
Source	Synthetic

Applications

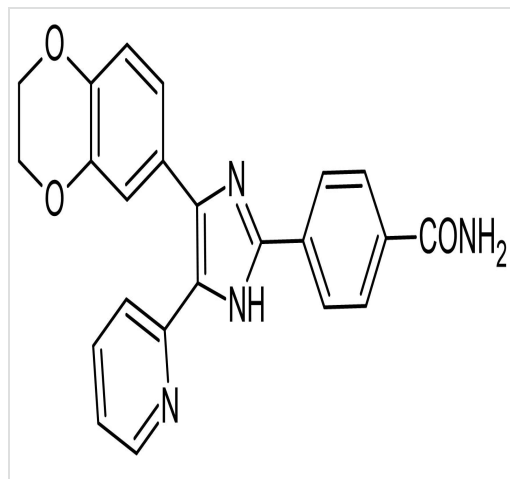
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab120220 in the following tested applications.

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

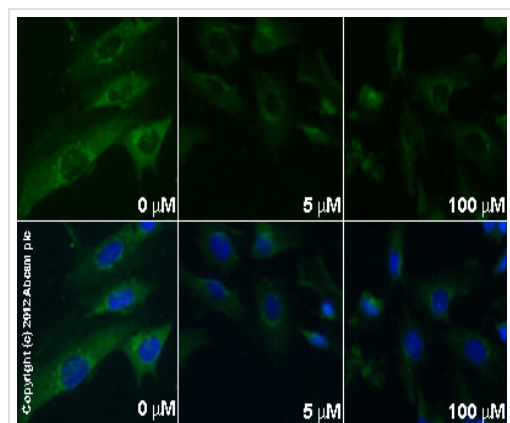
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

Images



Chemical Structure - D4476, CK1 inhibitor
(ab120220)

2D chemical structure image of ab120220, D4476, CK1 inhibitor



Functional Studies - D4476, CK1 inhibitor
(ab120220)

ab38511 staining βcatenin (phospho Thr42 + Ser45) in SK-N-SH cells treated with D4476 (ab120220), by ICC/IF. Decrease in expression of βcatenin (phospho Thr42 + Ser45) correlates with increased concentration of D4476, as described in literature. The cells were incubated at 37°C for 2h in media containing different concentrations of ab120220 (D4476) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature 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 **ab38511** (5 μg/ml) 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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