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## DATASHEET

SB 202190

### Product overview

<b>Name</b>	SB 202190
<b>Cat No</b>	HB1301
<b>Alternative names</b>	SB-202190
<b>Biological action</b>	Inhibitor
<b>Purity</b>	>99%
<b>Description</b>	Potent ATP competitive p38 MAPK inhibitor. 3D growth matrix component, promotes long-term organoid growth and can be used in production of gastric organoids. Promotes stability of human pluripotent stem cells.

### Images



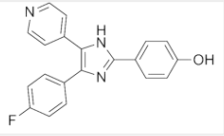
### Biological Data

<b>Biological description</b>	Potent ATP competitive p38 MAPK inhibitor ( $IC_{50}$ values are 50 and 100 nM for p38 $\alpha$ and p38 $\beta$ respectively).  It inhibits TNF, IL-1 and CK1 (approx $IC_{50}$ = 0.6 $\mu$ M) and therefore inhibits CREB phosphorylation. It exhibits little or no activity at CK2.  It displays anti-inflammatory properties and induces apoptosis.  It can also be used as a 3D growth matrix component, promotes long-term organoid growth and can be used in production of gastric organoids.  Also promotes stability of human pluripotent stem cells.
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### Solubility & Handling

<b>Storage instructions</b>	-20 °C
<b>Solubility overview</b>	Soluble in DMSO (100mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

## Chemical Data

<b>Chemical name</b>	4-[4-(4-Fluorophenyl)-5-(4-pyridinyl)-1H-imidazol-2-yl]phenol
<b>Molecular Weight</b>	331.35
<b>Chemical structure</b>	
<b>Molecular Formula</b>	C <sub>20</sub> H <sub>14</sub> N <sub>3</sub> OF
<b>CAS Number</b>	152121-30-7
<b>PubChem identifier</b>	16759148
<b>SMILES</b>	OC1=CC=C(C=C1)C1=NC(=C(N1)C1=CC=NC=C1)C1=CC=C(F)C=C1
<b>InChiKey</b>	YKRNPHOBDQUQTG-UHFFFAOYSA-N

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## References

### Non-specific in vivo inhibition of CK1 by the pyridinyl imidazole p38 inhibitors SB 203580 and SB 202190.

Shanware NP *et al* (2009) BMB Rep 42(3)

**PubMedID** [19336000](#)

### Specificity and mechanism of action of some commonly used protein kinase inhibitors.

Davies SP *et al* (2000) Biochem J 351(Pt 1)

**PubMedID** [10998351](#)

### Induction of apoptosis by SB202190 through inhibition of p38beta mitogen-activated protein kinase.

Nemoto S *et al* (1998) J Biol Chem 273(26)

**PubMedID** [9632706](#)

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