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## DATASHEET

BCTC

### Product overview

<b>Name</b>	BCTC
<b>Cat No</b>	HB1190
<b>Biological action</b>	Antagonist
<b>Purity</b>	>98%
<b>Description</b>	Potent, selective TRPV1 channel antagonist

### Images



### Biological Data

<b>Biological description</b>	Potent and selective TRPV1 channel antagonist ( $IC_{50}$ values are 6.0 and 35 nM for acid- and capsaicin-induced TRPV1 channels respectively). Also potent TRPM8 channel antagonist ( $IC_{50} = 143$ nM). Blood brain barrier permeable. Displays analgesic properties.
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### Solubility & Handling

<b>Storage instructions</b>	Room temperature
<b>Solubility overview</b>	Soluble in DMSO (100mM) and in ethanol (40mM)
<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-(3-Chloro-2-pyridinyl)-N-[4-(1,1-dimethylethyl)phenyl]-1-piperazinecarboxamide
<b>Molecular Weight</b>	372.89
<b>Chemical structure</b>	
<b>Molecular Formula</b>	$C_{20}H_{25}ClN_4O$
<b>CAS Number</b>	393514-24-4
<b>PubChem identifier</b>	9929425

<b>SMILES</b>	<chem>CC(C)(C)C1=CC=C(C=C1)NC(=O)N2CCN(CC2)C3=C(C=CC=N3)Cl</chem>
<b>InChi</b>	InChI=1S/C20H25ClN4O/c1-20(2,3)15-6-8-16(9-7-15)23-19(26)25-13-11-24(12-14-25)18-17(21)5-4-10-22-18/h4-10H,11-14H2,1-3H3,(H,23,26)
<b>InChiKey</b>	ROGUAPYLUC HQGK-UHFFFAOYSA-N
<b>MDL number</b>	MFCD08690556

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## References

### Use and limitations of three TRPV-1 receptor antagonists on smooth muscles of animals and man: a vote for BCTC.

Benko R *et al* (2012) Eur J Pharmacol 674(1)

**PubMedID** [22056835](#)

### N-(4-tertiarybutylphenyl)-4-(3-chloropyridin-2-yl)tetrahydropyrazine -1(2H)-carbox-amide (BCTC), a novel, orally effective vanilloid receptor 1 antagonist with analgesic properties: I. in vitro characterization and pharmacokinetic properties.

Valenzano KJ *et al* (2003) J Pharmacol Exp Ther 306(1)

**PubMedID** [12721338](#)

### N-(4-Tertiarybutylphenyl)-4-(3-cholorpyridin-2-yl)tetrahydropyrazine -1(2H)-carbox-amide (BCTC), a novel, orally effective vanilloid receptor 1 antagonist with analgesic properties: II. in vivo characterization in rat models of inflammatory and neuropath

Pomonis JD *et al* (2003) J Pharmacol Exp Ther 306(1)

**PubMedID** [12721336](#)

### Conservation of functional and pharmacological properties in the distantly related temperature sensors TRVP1 and TRPM8.

Weil A *et al* (2005) Mol Pharmacol 68(2)

**PubMedID** [15911692](#)

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