

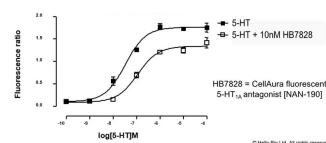
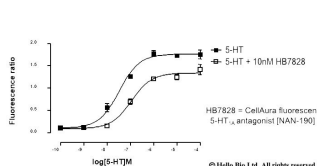
## DATASHEET

CA200992 CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190]

### Product overview

<b>Name</b>	CA200992 CellAura fluorescent 5-HT <sub>1A</sub> antagonist [NAN-190]
<b>Cat No</b>	HB7828
<b>Biological description</b>	Fluorescent 5-HT <sub>1A</sub> serotonin receptor antagonist (apparent K <sub>D</sub> values are 8.75, 6.34 and 5.57 for 5-HT <sub>1A</sub> , 5-HT <sub>2A</sub> and 5-HT <sub>1B</sub> receptors respectively). Antagonizes the activity of serotonin, a 5-HT <sub>1A</sub> agonist.
<b>Alternative names</b>	CA200992 5HT1A-633-AN2
<b>Biological action</b>	Antagonist
<b>Purity</b>	>97%
<b>Description</b>	Fluorescent 5-HT <sub>1A</sub> receptor antagonist

### Images



### Biological Data

**Application notes**  
**Pharmacological validation**

For imaging at the 5-HT<sub>1A</sub> receptor use solutions up to 200 nM.

The CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190] ligand was shown to antagonize the activity of the 5-HT<sub>1A</sub> agonist, 5-HT, in the CHO cell line expressing the human 5-HT<sub>1A</sub> receptor, using the Ca<sup>2+</sup> sensitive fluorescent indicator, Fura-2 AM. Cells were plated in clear bottom black 96-well tissue culture plates and grown to confluence for 24 hours. Medium was then removed and cells incubated in loading buffer comprising HEPES buffered saline with 0.5mM Brilliant Black BN, 2.5mM probenecid, 0.023% pluronic acid F-127 and 2.5µg/ml Fura-2 AM at 37°C for 30 – 45 mins, either in the presence of CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190] or a DMSO vehicle control. During this time serial dilutions of the 5-HT<sub>1A</sub> agonist, 5-HT, were prepared in HEPES buffered saline containing 2.5mM probenecid and 0.5mM Brilliant Black BN. To determine the antagonist activity of CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190], serial dilutions of the agonist was added to wells with or without CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190]. The agonist Ca<sup>2+</sup> response in the absence or presence of CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190] was determined on a Molecular Devices FlexStation by exciting at 340 nm and 380 nm and ratioing the fluorescence intensity of Fura-2 signal collected at 320 nm. The apparent KD was calculated from the rightward shift of the agonist response curve in the presence of CellAura fluorescent 5-HT<sub>1A</sub> antagonist [NAN-190], compared to the response curve for the agonist alone.

### Solubility & Handling

**Storage instructions** -20°C (protect from light)

**Solubility overview  
Handling**

Soluble in DMSO

After thawing individual aliquots for use, we recommend briefly sonicating the sample to ensure it is fully dissolved and the solution is homogeneous. We do not recommend using the product after subjecting it to repetitive freeze-thaw cycles.

**Shipping conditions**

The product, supplied in a dry form, is stable at ambient temperature for periods of up to a few days and does not require shipping on ice/dry ice.

**Important**

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

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## Chemical Data

<b>Molecular Weight</b>	1025
<b>Source</b>	Synthetic
<b>Formulation</b>	Lyophilized film
<b>Excitation</b>	633 nm
<b>Emission</b>	650 nm

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