

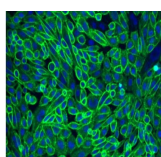
## DATASHEET

### CA200773 CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green]

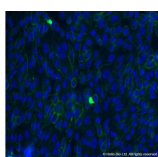
#### Product overview

<b>Name</b>	CA200773 CellAura fluorescent D <sub>1</sub> antagonist [SKF83566-green]
<b>Cat No</b>	HB7822
<b>Description</b>	Fluorescent D <sub>1</sub> dopamine receptor antagonist
<b>Biological description</b>	Selective fluorescent D <sub>1</sub> dopamine receptor antagonist (apparent K <sub>D</sub> values are 7.09, 1, D <sub>2</sub> and D <sub>5</sub> receptors respectively). Also antagonizes the activity of SKF 83566, a D <sub>1</sub> dopamine receptor agonist. Displays no intrinsic agonist activity.
<b>Alternative names</b>	CA200773
<b>Biological action</b>	Antagonist
<b>Purity</b>	>97%

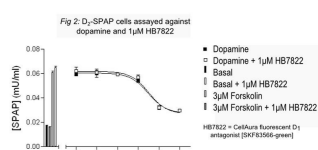
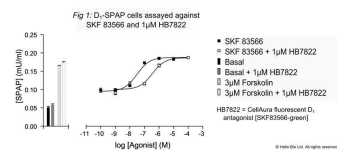
#### Images



HB7822 (green) binding to hα1 CHO cells expressing dopamine D<sub>1</sub> receptors.



Strain selected by unlabeled competitor SKF 22390 (1μM), nuclear counterstain with Hoechst.



#### Biological Data

##### Application notes Pharmacological validation

For imaging at the D<sub>1</sub> receptor use solutions up to 100 nM. The CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green] ligand was shown to antagonize the activity of the D<sub>1</sub> agonist, SKF 83566, in a recombinant CHO cell line expressing the human D<sub>1</sub> receptor and a cyclic AMP-responsive secreted placental alkaline phosphatase (SPAP) reporter gene. The cyclic AMP-induced expression of SPAP was measured under basal and forskolin-stimulated (maximal) conditions. Addition of CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green] to the basal or forskolin-stimulated cells did not significantly alter basal and stimulated SPAP levels, demonstrating that CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green] has no intrinsic agonist activity. To determine the apparent KD for CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green], cells were treated with varying concentrations of SKF 83566 alone, or in the presence of 1μM CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green], and the cyclic AMP-induced expression of SPAP measured. The apparent KD was calculated from the rightward shift of the agonist response curve in the presence of CellAura fluorescent D<sub>1</sub> antagonist [SKF83566-green], compared to the response curve for the agonist alone.

#### Solubility & Handling

##### Storage instructions Solubility overview Handling

-20 °C (protect from light)  
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.

---

**Chemical Data**

<b>Molecular Weight</b>	877
<b>Source</b>	Synthetic
<b>Formulation</b>	Lyophilized film
<b>Excitation</b>	488 nm
<b>Emission</b>	525 / 550 nm

---