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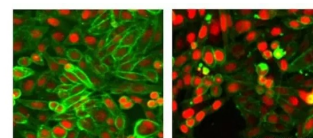
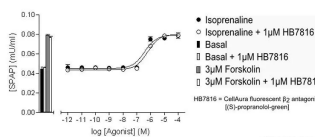
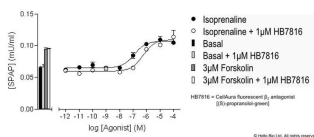
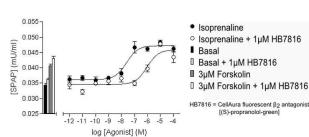
## DATASHEET

CA200693 CellAura fluorescent  $\beta_2$  antagonist [(S)-propranolol-green]

### Product overview

<b>Name</b>	CA200693 CellAura fluorescent $\beta_2$ antagonist [(S)-propranolol-green]
<b>Cat No</b>	HB7816
<b>Biological description</b>	Fluorescent $\beta_2$ -adrenoceptor antagonist (apparent $K_D$ values are 7.68, 6.42 and 95%
<b>Description</b>	Fluorescent $\beta_2$ -adrenoceptor antagonist

### Images



HB7816 (100nM) binding to live CHO cells expressing  $\beta_2$  adrenoceptors. Binding blocked by the unlabeled competitor. IC118551 (1 $\mu$ M). Nuclei have been counter stained with Dapi.



### Biological Data

#### Application notes Pharmacological validation

For imaging at  $\beta_1$  /  $\beta_2$  /  $\beta_3$  adrenoceptors use solutions up to 100 nM.

The CellAura fluorescent  $\beta_2$  antagonist [(S)-propranolol-green] ligand was shown to antagonize the activity of the non-selective  $\beta$  agonist, isoprenaline, in three separate recombinant CHO cell lines expressing either the human  $\beta_1$ ,  $\beta_2$  or  $\beta_3$  receptor and a cyclic AMP-recombinant 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  $\beta_2$  antagonist [(S)-propranolol-green] to the basal or forskolin-stimulated cells did not significantly alter basal and stimulated SPAP levels, demonstrating that CellAura fluorescent  $\beta_2$  antagonist [(S)-propranolol-green] has no intrinsic agonist activity at either  $\beta_1$ ,  $\beta_2$  or  $\beta_3$  receptors. To determine the apparent  $K_D$  for CellAura fluorescent  $\beta_2$  antagonist [(S)-propranolol-green] at  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  receptors, cells were treated with varying concentrations of isoprenaline alone, or in the presence of 1  $\mu$ M CellAura fluorescent  $\beta_2$  antagonist [(S)-propranolol-green], and the cyclic AMP-induced expression of SPAP measured. The apparent  $K_D$  was calculated from the rightward shift of the agonist response curve in the presence of CellAura fluorescent  $\beta_2$  antagonist [(S)-propranolol-green], compared to the response curve for the agonist alone, for  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  receptor expressing cell lines.

### Solubility & Handling

#### Storage instructions Solubility overview

-20 °C (protect from light)  
Soluble in DMSO

Handling	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

Molecular Weight	736
Source	Synthetic
Formulation	Lyophilized film
Excitation	488 nm
Emission	525 / 550nm

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