

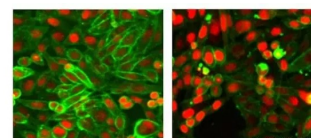
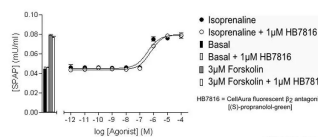
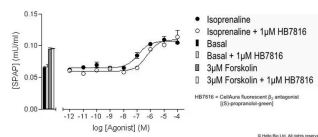
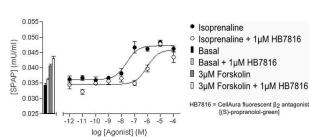
DATASHEET

CA200693 CellAura fluorescent β_2 antagonist [(S)-propranolol-green]

Product overview

Name	CA200693 CellAura fluorescent β_2 antagonist [(S)-propranolol-green]
Cat No	HB7816
Biological description	Fluorescent β_2 -adrenoceptor antagonist (apparent K_D values are 7.68, 6.42 and 95%
Description	Fluorescent β_2 -adrenoceptor antagonist

Images



HB7816 (100nM) binding to live CHO cells expressing β_2 adrenergic receptors. Binding blocked by the unlabelled competitor IC118551 (1µM). Nuclei have been counterstained with DAPI.



Biological Data

Application notes Pharmacological validation

For imaging at β_1 / β_2 / β_3 adrenoceptors use solutions up to 100 nM. The CellAura fluorescent β_2 antagonist [(S)-propranolol-green] ligand was shown to antagonize the activity of the non-selective β agonist, isoprenaline, in three separate recombinant CHO cell lines expressing either the human β_1 , β_2 or β_3 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 β_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 β_2 antagonist [(S)-propranolol-green] has no intrinsic agonist activity at either β_1 , β_2 or β_3 receptors. To determine the apparent KD for CellAura fluorescent β_2 antagonist [(S)-propranolol-green] at β_1 , β_2 and β_3 receptors, cells were treated with varying concentrations of isoprenaline alone, or in the presence of 1 μ M CellAura fluorescent β_2 antagonist [(S)-propranolol-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 β_2 antagonist [(S)-propranolol-green], compared to the response curve for the agonist alone, for β_1 , β_2 and β_3 receptor expressing cell lines.

Solubility & Handling

Storage instructions	-20 °C (protect from light)
Solubility overview	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.

Chemical Data

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