

DATASHEET

CA200656 CellAura fluorescent β_2 antagonist [(±)-propranolol]

Product overview

Name	CA200656 CellAura fluorescent β_2 antagonist [(±)-propranolol]
Cat No	HB7820
Description	Fluorescent β_2 adrenoceptor antagonist
Biological description	Fluorescent adrenoceptor β_2 antagonist (apparent K_D values are 8.87, 7.25 and 6.98 for β_2 , β_1 and β_3 respectively). Antagonizes the activity of isoprenaline, a non-selective β -adrenoceptor agonist.
Alternative names	CA200656 β_2 -633-AN
Biological action	Antagonist
Purity	>97%

Images

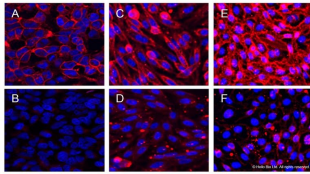
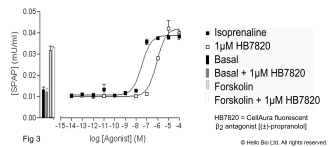
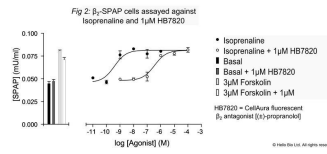
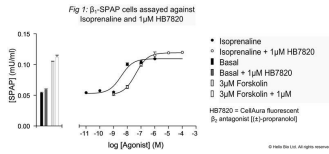


Fig 1: β_1 -SPAP cells assayed against isoprenaline and 1 μ M HB7820



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 [(±)-propranolol] 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. To determine the apparent KD for CellAura fluorescent β_2 antagonist [(±)-propranolol] 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 [(±)-propranolol], 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 [(±)-propranolol], compared to the response curve for the agonist alone, for β_1 , β_2 and β_3 receptor expressing cell lines. The ACS β_2 adrenoceptor CHO-K1 cell line was also transfected with the cAMP-responsive SPAP reporter construct and tested for its functional response to varying concentrations of isoprenaline alone, or in the presence of 1 μ M CellAura fluorescent β_2 antagonist [(±)-propranolol].

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

Molecular Weight

834

Formulation

Lyophilized film

Excitation

633 nm

Emission

650 nm
