

Caution: For Laboratory Use. A research reagent for research purposes only

Human Adrenergic β 2 Receptor, γ -Irradiated Frozen Cells

Product No.: ES-034-CF

Lot No.: 540-663-D

Material Provided

| | |
|----------------|--|
| Cells: | 1 x 1 mL frozen aliquot |
| Format: | ~2.5 x 10 ⁶ cells / mL in Ham's F12, 10% FBS with 10 % DMSO |

Product Information

| | |
|--|--|
| Cellular Background: | CHO-K1 |
| Frozen cells info: | Frozen recombinant, γ -irradiated CHO-K1 cells expressing the human adrenergic β 2 receptor. |
| DNA Sequence: | Identical to coding sequence of GenBank J02960. |
| Corresponding Protein Sequence: | Identical to GenBank AAF20199 |
| Storage Conditions: | Store in liquid nitrogen (vapor phase) immediately upon receipt, or maximum 15 days at -80°C. cAMPZen [®] is designed for single use only. Do not refreeze. |

Quality Control

EC₅₀ for a reference agonist is determined using a LANCE[®] cAMP assay (Figure 1). Mycoplasma test is performed using MycoAlert[®] Mycoplasma detection kit. We certify that these results meet our quality release criteria.

| | |
|---|--|
| Formoterol hemifumarate - (EC₅₀): | 0.014 nM |
| Mycoplasma: | This cell line tested negative for Mycoplasma. |

Recommended Use and Thawing Conditions

Assay Medium: HBSS 1X (without phenol red); 5 mM HEPES; BSA-stabilizer (7.5% solution); 0.5 mM IBMX (pH 7.4).

Thawing Cells: Using appropriate personal protective equipment, place the frozen aliquot in a 37°C water bath and agitate until its content is thawed completely. Immediately remove from water bath, transfer content to 10 mL assay medium and centrifuge (150 x g, 5 min). Resuspend cell pellet in appropriate volume of assay medium for use in the selected LANCE[®] cAMP assay (see LANCE[®] cAMP Assays section).

Typical Product Data

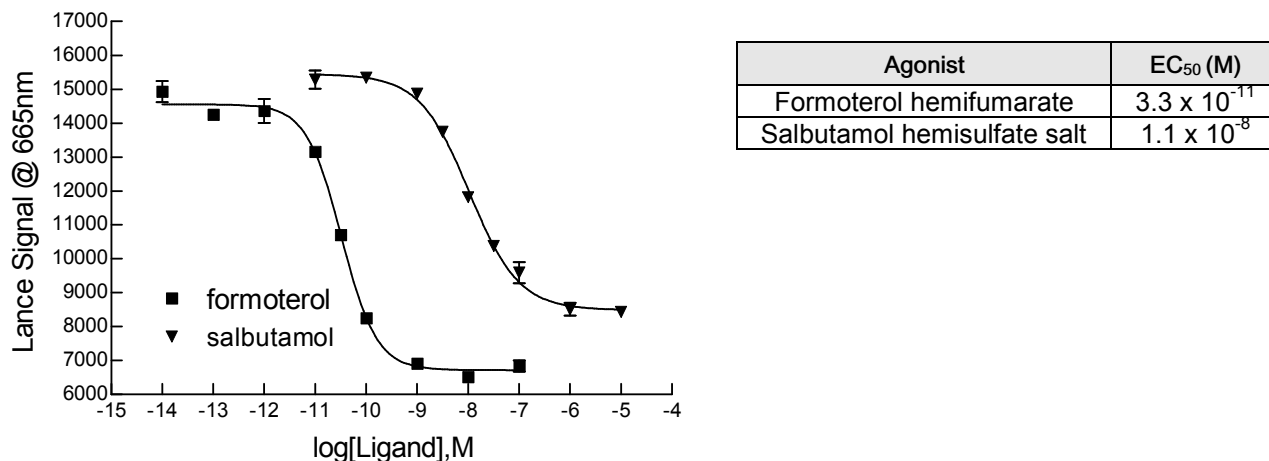


Figure 1: Agonist Response in LANCE[®] cAMP assay

An agonist dose-response experiment was performed in 384-well format using 5000 cells/well. Cell stimulation was performed for 30 min at room temperature. Reader: EnVision[®]. Data from a representative experiment are shown. The Z'-factor was calculated for Formoterol hemifumarate with at least 16 background and 16 maximal signal points (Z' = 0.65).

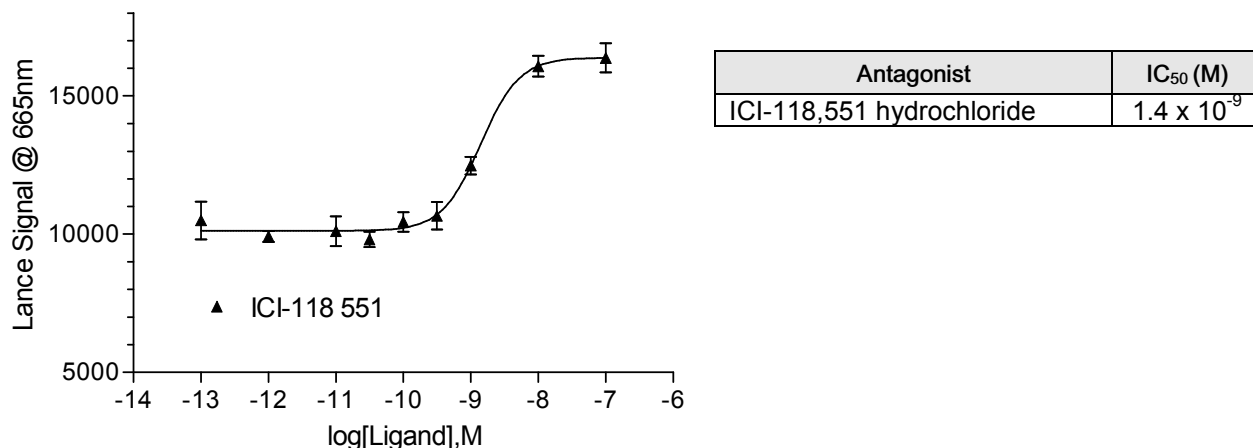


Figure 2: Antagonist Response in LANCE[®] cAMP assay

An antagonist dose-response experiment was performed in 384-well format using 5000 cells/well and 0.1 nM Formoterol hemifumarate (reference agonist). Cell stimulation was performed for 10 min at room temperature. Reader: EnVision[®]. Data from a representative experiment are shown.

Table 1. References of compounds used for functional characterization

| Name | Provider | Cat n° | Working Stock Solution |
|-----------------------------|----------|--------|--------------------------|
| Formoterol hemifumarate | Tocris | 1448 | 10 mM in DMSO |
| Salbutamol hemisulfate salt | Tocris | 1660 | 10 mM in PBS-D, 0.1% BSA |
| ICI-118,551 hydrochloride | Tocris | 0821 | 50 mM in water |

LANCE® cAMP Assays

LANCE® Ultra cAMP - please refer to the user manual included with the LANCE® Ultra cAMP kits:

TRF0262 – 1 000 Assay points

TRF0263 – 10 000 Assay points

TRF0264 – 50 000 Assay points

LANCE® cAMP - please refer to the user manual included with the LANCE® cAMP kits:

AD0262 – 500 Assay points

AD0262E – 1 000 Assay points

AD0263 – 10 000 Assay points

AD0264 – 50 000 Assay points

Suggested Materials and Instrumentation

Please visit our website

www.perkinelmer.com/CellLines

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