

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.: 610-623-A

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):	0.019 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

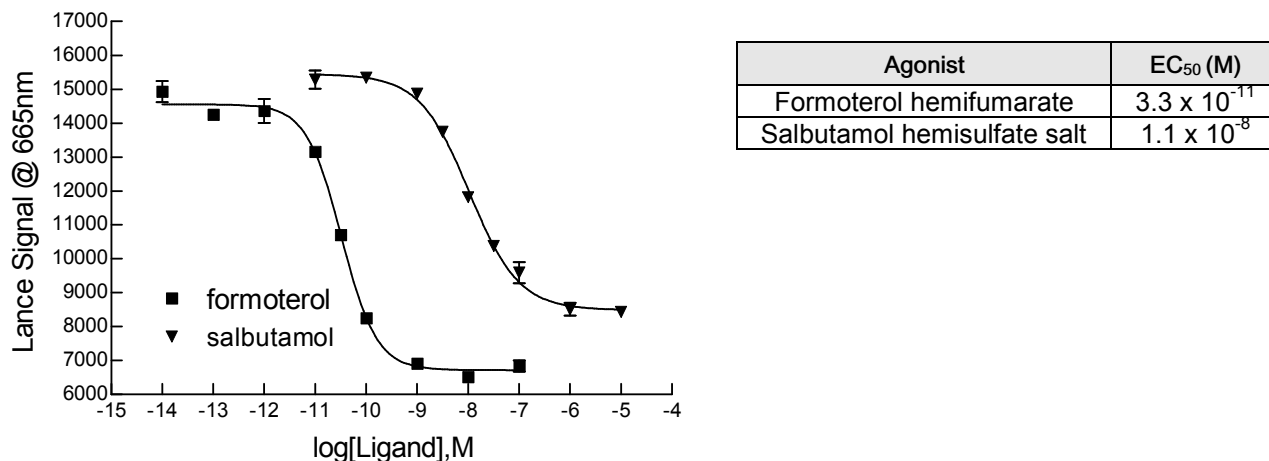


Figure 1: Agonist Response in LANCE[®] cAMP assay

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).

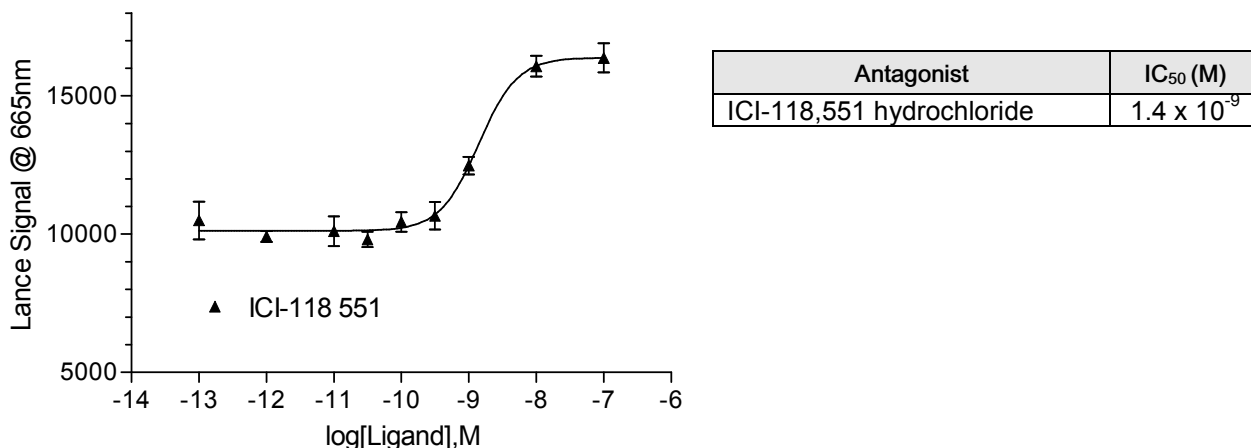


Figure 2: Antagonist Response in LANCE[®] cAMP assay

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

This product is not for resale or distribution except by authorized distributors.

LIMITED WARRANTY: PerkinElmer BioSignal Inc. warrants that, at the time of shipment, the products sold by it are free from defects in material and workmanship and conform to specifications which accompany the product. PerkinElmer BioSignal Inc. makes no other warranty, express or implied with respect to the products, including any warranty of merchantability or fitness for any particular purpose. Notification of any breach of warranty must be made within 60 days of receipt unless otherwise provided in writing by PerkinElmer BioSignal Inc. No claim shall be honored if the customer fails to notify PerkinElmer BioSignal Inc. within the period specified. The sole and exclusive remedy of the customer for any liability of PerkinElmer BioSignal Inc. of any kind including liability based upon warranty (express or implied whether contained herein or elsewhere), strict liability contract or otherwise is limited to the replacement of the goods or the refunds of the invoice price of goods. PerkinElmer BioSignal Inc. shall not in any case be liable for special, incidental or consequential damages of any kind.

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com



For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

Copyright ©2009, PerkinElmer, Inc. All rights reserved. PerkinElmer[®] is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.