

Certificate of Analysis

ER- β Competitor Assay, Red, 1 Kit



Part Number: P3032
Lot Number: 1099296
Immediate Storage: -80°C
Shipping Conditions: dry ice

5791 Van Allen Way
Carlsbad, CA 92008
Phone: 760.603.7200
Fax: 760.602.6500
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Components:

Description	Composition	Quantity	Part Number	Lot Number
ER Red Assay Buffer	Buffer (pH 8.0) containing protein stabilizing agents and 10% glycerol.	25 mL	P3031	36952GG
Fluormone™ EL Red	200 nM in 20 mM Tris, 90% Methanol	100 μL	P3030	35367FF
Estrogen Receptor- β , Human Recombinant	Estrogen Receptor- β , Human Recombinant, full length untagged in 50 mM BIS-TRIS-Propane (pH 9.0), 400 mM KCL, 2mM DTT, 1 mM EDTA and 10% Glycerol.	750 pmols	P2466*	919685B

*See individual COA

Storage and Handling: The performance of this product is guaranteed for 6 months from the date of purchase if stored and handled properly.

Description	Storage and Handling
ER Red Assay Buffer	20-30°C. Mix by inversion prior to use.
Fluormone™ EL Red	-20°C . Vortex prior to use. The Fluormone™ EL Red may have estrogenic activity in vivo and therefore should be handled with caution.
Estrogen Receptor- β , Human Recombinant	Store at -80°C . At first use, aliquot and store at -80°C to avoid multiple freeze-thaws. Mix gently, do not vortex. If properly stored at -80°C , this product is guaranteed for 6 months from date of purchase.

QUALITY ASSURANCE

Functional Testing:

Kit components are functionally tested for performance in the assay using a titration of a known agonist or antagonist.

Assay Specifications:

Using the conditions described in the kit protocol and keeping the plates in the dark and covered to prevent evaporation this kit has the following specification(s):

Specification	Value
ΔmP (0-100% inhibition)	> 100 mP
IC_{50} Estradiol	< 40 nM

Manufacturing Specifications:

The concentration of Fluormone™ EL Red was determined by measuring its fluorescent intensity.

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For questions, please contact our Technical Support Team

N. Am Ph#: 800-955-6288 or INTL Ph#: 760-603-7200 Select option 5, ext. 40266 Email: drugdiscoverytech@lifetech.com

Certificate of Analysis

Estrogen Receptor- β , Human Recombinant, 750 pmols



Part Number: P2466
Lot Number: 919685B
Immediate Storage: -80°C
Shipping Conditions: dry ice

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Description:

Estrogen Receptor- β , Human Recombinant, full length untagged.

Activity Testing:

The concentration of active receptor is **4600 nM** as determined by quantitation of [6, 7- ^3H 9 (N)]-Estradiol receptor complexes using a hydroxylapatite (HAP) assay. Using the protein concentration as determined by Bradford, the specific activity is **13900 pmol/mg**.

Concentration:

0.33 mg/mL total protein as measured using the Bradford protein assay with BSA as a standard.

Assay Concentration(s):

10 nM Estrogen Receptor- β , Human Recombinant is the final concentration recommended for the Polar ScreenTM ER- β Competitor Assay, Green (P2700).

30 nM Estrogen Receptor- β , Human Recombinant is the final concentration recommended for the ER- β Competitor Assay, Red (P3032).

Aliases:

ESR2, NR3A2, ERB

Storage and Handling:

Store at -80°C . At first use, aliquot and store at -80°C to avoid multiple freeze-thaws. **Mix gently, do not vortex.** If properly stored at -80°C , this product is guaranteed for 6 months from date of purchase.

Estrogen Receptor may aggregate with rough handling. Thaw in room temperature water bath and return to 4°C .

Storage Buffer:

50 mM BIS-TRIS-Propane (pH 9.0), 400 mM KCL, 2mM DTT, 1 mM EDTA and 10% Glycerol.

QUALITY ASSURANCE

Functional Testing:

The performance of each lot of Estrogen Receptor- β , Human Recombinant is confirmed in the following assay(s):

Polar ScreenTM ER- β Competitor Assay, Green (P2700). The ligand Estradiol, [6, 7- ^3H 9 (N)] was shown to displace FluormoneTM ES2 Green from Estrogen Receptor- β , Human Recombinant.

ER- β Competitor Assay, Red (P3032), Estradiol, [6, 7- ^3H 9 (N)] was shown to displace FluormoneTM EL Red from Estrogen Receptor- β , Human Recombinant.

Gel Information for Estrogen Receptor- β , Human Recombinant

Page Description: The SDS-PAGE and/or Native PAGE were run on 4-20% Tris-Glycine Novex[®] gels (Catalog #: EC6025BOX).

Lane 1: InvitrogenTM BenchMarkTM Protein Ladder (Catalog #: 10747-012).

Lane 2: 1 μg Estrogen Receptor- β , Human Recombinant

Lane 3: 2 μg Estrogen Receptor- β , Human Recombinant

Lane 4: 5 μg Estrogen Receptor- β , Human Recombinant

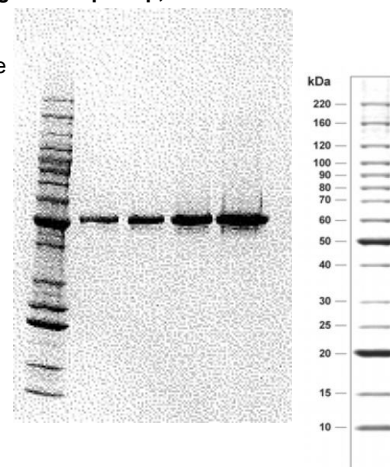
Lane 5: 10 μg Estrogen Receptor- β , Human Recombinant

Purity:

85% as determined by a Coomassie[®] blue stained SDS-PAGE gel.

Molecular Weight:

53.4 kDa. Calculated from the protein sequence(s).



Protein sequence alignment with reference sequence(s)

GenBank Accession Number: NP_001428.1

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1 MNYSIPSNVT NLEGGPGRQT TSPNVLWPTP GHLSPLVVHR QLSHLYAEPQ KSPWCEARSL EHTLPVNRRET LKRVKVSNGRC ASPVTGPGSK RDAHFCVCS IVGN ER BETA
54 MNYSIPSNVT NLEGGPGRQT TSPNVLWPTP GHLSPLVVHR QLSHLYAEPQ KSPWCEARSL EHTLPVNRRET LKRVKVSNGRC ASPVTGPGSK RDAHFCVCS NP_001428.1

101 DYASGYHYGV WSCGEGKAFF KRSIQGHNDY ICPATNQCTI DKNRRKSCQA CRLRKCYEVG MVKCGSRRER CGYRLVRRQR SADEQLHCAG KAKRSGGHAP
154 DYASGYHYGV WSCGEGKAFF KRSIQGHNDY ICPATNQCTI DKNRRKSCQA CRLRKCYEVG MVKCGSRRER CGYRLVRRQR SADEQLHCAG KAKRSGGHAP

201 RVRELLLDAL SPEQLVLTLL EAEPHVLIS RPSAPFTEAS MMSLTKLAD KELVHMISWA KKIPGFVELS LFDQVRLLES CWMEVLMGL MWRSIDHPGK
254 RVRELLLDAL SPEQLVLTLL EAEPHVLIS RPSAPFTEAS MMSLTKLAD KELVHMISWA KKIPGFVELS LFDQVRLLES CWMEVLMGL MWRSIDHPGK

301 LIFAPDLVLD RDEGKCEVEI LEIFDMLLAT TSRFRELKIQ HKEYLCVKAM ILLNSSMYPL VTATQDADSS RKLALHLLNAV TDALVWVIAK SGISSQQQSM
354 LIFAPDLVLD RDEGKCEVEI LEIFDMLLAT TSRFRELKIQ HKEYLCVKAM ILLNSSMYPL VTATQDADSS RKLALHLLNAV TDALVWVIAK SGISSQQQSM

401 RLANLLMLLS HVRHASNKG M EHLNLMKCKN VVPVYDLLLL MLNAHVLRCG KSSITGSECS PAEDSKSKEG SQNPQSQ
454 RLANLLMLLS HVRHASNKG M EHLNLMKCKN VVPVYDLLLL MLNAHVLRCG KSSITGSECS PAEDSKSKEG SQNPQSQ
    
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* highlighted residues denote differences from the reference protein sequence(s).



Becky. Baker, QA Engineer II

Date: 01/May/2012

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