

# Certificate of Analysis

## LanthaScreen® TR-FRET PPAR Delta Competitive Binding Assay Kit, 1 Kit



**Part Number:** PV4893

**Lot Number:** 1399663

**Immediate Storage:** Refer to Component's Storage Temperature.

**Shipping Conditions:** dry ice

5791 Van Allen Way

Carlsbad, CA 92008

Phone: 760.603.7200

Fax: 760.602.6500

www.lifetechnologies.com

### Components:

Description	Composition	Quantity	Part Number	Lot Number
PPAR delta - LBD (GST)	Recombinant Human Peroxisome Proliferator Activated Receptor delta ligand binding domain in 50 mM Tris-HCl (pH 8.0), 150 mM KCl, 0.5 mM EDTA, 0.03% NP-40, 5 mM DTT and 20% Glycerol.	10 µg	PV4693*	502070K
Fluormone™ Pan-PPAR Green	2 µM in 95% ethanol/water.	200 µL	PV4896	1252697B
LanthaScreen® Tb-anti-GST (Goat) Antibody	10 mM HEPES 137 mM NaCl, 2.7 mM KCl (HEPES buffered saline).	25 µg	PV3550*	1217949A
TR-FRET PPAR Assay Buffer	Proprietary Buffer (pH 7.5).	2 × 25 mL	PV4895	1261374B
DTT Solution	1M DTT in water.	1 mL	P2325	1275458A

\*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
PPAR delta - LBD (GST)	If properly stored in its original container at -80°C, this product is guaranteed for 6 months from date of purchase. <b>Mix gently, do not vortex.</b>
Fluormone™ Pan-PPAR Green	-80°C. <b>Vortex</b> prior to use. <b>Note: To completely remove Fluormone™ from the glass insert tube, a 10 µL pipette tip with a very narrow long tip, such as Rainin GPSL10S, is required.</b>
LanthaScreen® Tb-anti-GST (Goat) Antibody	If properly stored at -20°C, this product is guaranteed for 6 months from date of purchase.
TR-FRET PPAR Assay Buffer	Store at 4°C. Thaw upon receipt.
DTT Solution	-20°C

## QUALITY ASSURANCE

### Functional Testing:

Kit components are functionally tested for performance in the assay.

LanthaScreen® is a registered trademark of Life Technologies Corporation.

Invitrogen™ is a trademark of Life Technologies Corporation.

These products may be covered by one or more Limited Use Label Licenses. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. O-091089 0110

All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

**For research use only. Not intended for human or animal therapeutic or diagnostic use.**

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](mailto:drugdiscoverytech@lifetech.com)

Printed 23/May/2013 Version 1.0 Page 1

# Certificate of Analysis

## PPAR delta - LBD (GST), 10 µg

Peroxisome Proliferator Activated Receptor delta Ligand Binding Domain, GST-tagged



**Part Number:** PV4693  
**Lot Number:** 502070K  
**Immediate Storage:** -80°C  
**Shipping Conditions:** dry ice

5791 Van Allen Way  
Carlsbad, CA 92008  
Phone: 760.603.7200  
Fax: 760.602.6500  
www.lifetechnologies.com

### Description:

Recombinant human Peroxisome Proliferator Activated Receptor delta ligand binding domain (amino acids 165-442; NP\_006229), GST-tagged, expressed in *E. coli* cells.

### Manufacturing:

Manufactured under ISO 9001 certification at Life Technologies in Madison, WI, USA.

### Concentration:

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

Calculated **7,850 nM**.

### Assay Concentration(s):

**2 nM** PPAR delta - LBD (GST) is the final concentration recommended for the Lanthascreen® TR-FRET PPAR delta Competitive Binding Assay (PV4893).

**5 nM** PPAR delta - LBD (GST) is the final concentration recommended for the Lanthascreen® TR-FRET PPAR delta Coactivator Assay (PV4685).

### Aliases:

PPARD, NR1C2

### Storage and Handling:

If properly stored in its original container at -80°C, this product is guaranteed for 6 months from date of purchase. **Mix gently, do not vortex.**

### Storage Buffer:

50 mM Tris-HCl (pH 8.0), 150 mM KCl, 0.5 mM EDTA, 0.03% NP-40, 5 mM DTT and 20% Glycerol.

Note: Effective April 1, 2008 the storage buffer for this protein was modified to contain 0.03% NP-40 as a stabilizing agent. The TR-FRET assay performance is unaffected.

## QUALITY ASSURANCE

### Functional Testing:

The performance of each lot of PPAR delta - LBD (GST) is confirmed in the following assay(s):

Lanthascreen® TR-FRET PPAR delta Competitive Binding Assay (PV4893). The ligand GW0742 was shown to competitively displace Fluormone™ Pan-PPAR Green (PV4896) from PPAR delta - LBD (GST).

Lanthascreen® TR-FRET PPAR delta Coactivator Assay (PV4685). The ligand GW501516 was shown to recruit Fluorescein-C33 coactivator peptide (PV4606) HVEMHPLLMLLMESQWGA to bind with PPAR delta - LBD (GST).

### Gel Information for PPAR delta - LBD (GST)

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

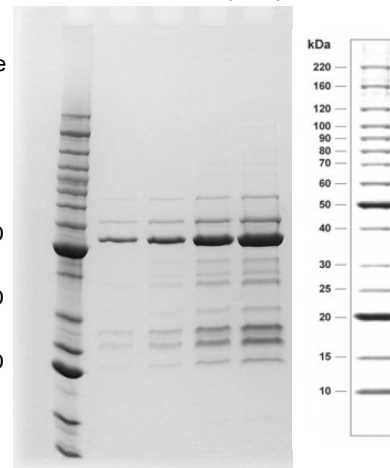
**Lane 1:** Invitrogen™ BenchMark™ Protein Ladder (Catalog #: 10747-012).

**Lane 2:** 1 µg PPAR delta - LBD (GST)

**Lane 3:** 2 µg PPAR delta - LBD (GST)

**Lane 4:** 5 µg PPAR delta - LBD (GST)

**Lane 5:** 10 µg PPAR delta - LBD (GST)



### Purity:

65% as determined by a Coomassie® blue stained SDS-PAGE gel.

### Molecular Weight:

59.9 kDa calculated from the protein sequence(s). Calculated from the protein sequence(s).

Protein sequence alignment with reference sequence(s)

GenBank Accession Number: NP\_006229.1

1 MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAISMLEGAVL GST  
1 MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAISMLEGAVL IVGN PPAR delta  
165 ----- NP\_006229.1

101 DIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPIQIDKYLKSSKYIA  
101 DIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPIQIDKYLKSSKYIA  
165 -----

201 WPLQGWQATFGGGDHPKSDLVPR  
201 WPLQGWQATFGGGDHPKSDLVPRPWSNQTSLYKAGSAAAPFTGSQYNPQVADLKAFSKHIYNAYLKNFNMTKKKARSILTGKASHTAPFVIHDIETLW  
165 -----GSQYNPQVADLKAFSKHIYNAYLKNFNMTKKKARSILTGKASHTAPFVIHDIETLW

224  
301 QAEKGLVWKQLVNGLPPYKEISVHVFYRCQCTTVETVRELTEFAKSIPSFSSFLNDQVTLTKYGVHEAIFAMLASIVNKDGLLVANGSGFVTREFLRSL  
221 QAEKGLVWKQLVNGLPPYKEISVHVFYRCQCTTVETVRELTEFAKSIPSFSSFLNDQVTLTKYGVHEAIFAMLASIVNKDGLLVANGSGFVTREFLRSL

224  
401 RKPFSDIIEPKFEFAVKFNALELDDSDALFIAAIIICGDRPGLMNVPRVEAIQDTILRALEFHLQANHPDAQYLFPKLLQKMADLRQLVTEHAQMMQRI  
321 RKPFSDIIEPKFEFAVKFNALELDDSDALFIAAIIICGDRPGLMNVPRVEAIQDTILRALEFHLQANHPDAQYLFPKLLQKMADLRQLVTEHAQMMQRI

224  
501 KKTETETSLHPLLQEIYKDMY.

\* highlighted residues denote differences from the reference protein sequence(s).



Becky. Baker, QA Engineer II

Date: 12/Apr/2012

LanthaScreen® is a registered trademark of Life Technologies Corporation.  
Novex® is a registered trademark of Life Technologies Corporation.  
Invitrogen™ is a trademark of Life Technologies Corporation.  
BenchMark™ is a trademark of Life Technologies Corporation.  
Coomassie® is a registered trademark of Imperial Chemical Industries.

For Research Use Only. Not for use in diagnostic procedures.

# Certificate of Analysis

## LanthaScreen® Tb-anti-GST (Goat) Antibody, 25 µg



**Part Number:** PV3550  
**Lot Number:** 1217949A  
**Immediate Storage:** -20°C  
**Shipping Conditions:** dry ice

5791 Van Allen Way  
Carlsbad, CA 92008  
Phone: 760.603.7200  
Fax: 760.602.6500  
[www.lifetechnologies.com](http://www.lifetechnologies.com)

### Description:

Tb-anti-GST Antibody used for TR-FRET Assays.

### Concentration:

0.54 mg/mL as determined spectrophotometrically at A280.  
Calculated **3600 nM** based on absorbance.

### Molecular Weight:

150 kDa. The weight of the Tb label is negligible compared to the weight of the antibody.

### Chelate to Antibody Ratio:

11:1 Determined spectrophotometrically.

### Storage and Handling:

If properly stored in its original container at -20°C, this product is guaranteed for 6 months from date of purchase.

**Spinning the antibody is important to reduce noise in the assay readout.** Upon thaw of stock or aliquot, mix antibody by inversion or pipetting and centrifuge stock vial or aliquot of antibody at ~10,000 rpm for 5 minutes prior to use. After centrifugation, pipet the quantity of antibody needed for the assay from the top of the liquid, thereby minimizing the potential mixing of material that has been spun to the bottom of the vial. To reduce the number of freeze/thaws aliquots may be prepared. However, to facilitate spinning and pipetting, aliquots below 50 µL are not recommended.

### Storage Buffer:

10 mM HEPES 137 mM NaCl, 2.7 mM KCl (HEPES buffered saline).

### Instrument Settings:

LanthaScreen® Tb-anti-GST (Goat) Antibody, used in a TR-FRET assay, requires a fluorescence plate reader capable of reading TR-FRET and filters in the **green** range. For instrument specific set-up information go to [www.lifetechnologies.com/instrumentsetup](http://www.lifetechnologies.com/instrumentsetup).

### Equivalent Usage:

The LanthaScreen® Tb-anti-GST (Rabbit) Antibody and the LanthaScreen® Tb-anti-GST (Goat) Antibody are **INTERCHANGEABLE** in any protocol requiring a LanthaScreen® Tb-anti-GST antibody.

## QUALITY ASSURANCE

### Functional Testing:

The performance of each lot of LanthaScreen® Tb-anti-GST (Goat) Antibody is confirmed by the LanthaScreen® TR-FRET LXR alpha Coactivator Assay (PV4655) using a titration of the agonist T0901317 (Caymen Chemicals 71810).

Tony Goossens, Engineer I, QA/QC

Date: 24/Aug/2012

LanthaScreen® is a registered trademark of Life Technologies Corporation.  
Invitrogen™ is a trademark of Life Technologies Corporation.

For Research Use Only. Not for use in diagnostic procedures.

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](mailto:drugdiscoverytech@lifetech.com)