

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

## Anti-GST Acceptor Beads

**Product No.:** AL110C (250 µg)  
AL110M (5 mg)  
AL110R (25 mg)

**Lot No.:** 673-779-A

### Material Provided

**Formats:**

Catalog number	Size	Volume	Assay points
AL110C	250 µg	50 µL	500
AL110M	5 mg	1 mL	10 000
AL110R	25 mg	5 mL	50 000

The number of assay points is based on an assay volume of 25 µL in 384-well assay plates using a final bead concentration of 20 µg/mL.

**Manufacturing Date:**

June 16, 2011

**Description:**

AlphaLISA Anti-GST Acceptor Beads at 5 mg/mL in PBS, pH 7.2 supplemented with 0.05% Proclin-300 as a preservative.

**Storage:**

Store in the dark at 4°C.

**Stability:**

This product is stable for at least 12 months from the manufacturing date when stored in its original packaging under recommended storage conditions.

### Product Information

**Intended use:**

This product is intended for use in homogeneous AlphaLISA assays for the capture of GST-tagged targets.

**FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.**

### Quality Control

Lot-to-lot consistency is confirmed by a Quality Control AlphaScreen® titration assay read on an EnVision® HTS Alpha instrument (see protocol below). We certify that the results meet our quality release criteria. *Note: maximum counts will vary depending on assay conditions as well as between lots. This variation has no impact on assay quality.*

Maximum signal: 5269 counts  
Minimum signal: 566 counts  
EC<sub>50</sub>: 16.85 nM

## Titration Assay (Quality Control Protocol)

This protocol provides a means to verify product performance.

The following reagents and materials are recommended.

Item	Suggested Source	Catalog #
AlphaScreen® Nickel chelate Donor Beads	PerkinElmer LAS, Inc.	AS101D (1 mg) AS101M (5 mg) AS101R (25 mg)
GST, 6 His-tagged protein	Millipore Corp.	12-523
AlphaLISA Universal Assay Buffer, 5X	PerkinElmer LAS, Inc.	AL001C (10 mL) AL001F (100 mL)
White OptiPlate™-384	PerkinElmer LAS, Inc.	6007290
TopSeal™-A Adhesive Sealing Film	PerkinElmer LAS, Inc.	6005185
EnVision® Multilabel Reader with the Alpha Option	PerkinElmer LAS, Inc.	-

### Recommendations:

- AlphaScreen® Donor beads are light-sensitive. All AlphaLISA assays using the Streptavidin-coated Donor Beads should be performed under subdued laboratory lighting of less than 100 lux. Alternatively, green filters (Roscolux filters #389 from Rosco, or the equivalent) can be applied to light fixtures. Incubation with AlphaScreen® Donor beads should always be performed in the dark. For example, assay reactions in a microplate can be covered with an opaque microplate.
- Sodium azide should not be added to stock solutions or assay components. Final concentrations of sodium azide higher than 0.001 % will decrease the AlphaLISA signal.
- Spin down tubes briefly before use to improve recovery of content (2,000 x g, 10-15 sec). Resuspend all reagents by vortexing before use.
- Use Milli-Q® grade water (18 MΩ•cm) to dilute the 5X AlphaLISA Universal Buffer.
- 1X AlphaLISA Universal Assay Buffer contains PBS, pH 7.5, 0.1% BSA, 0.01% Proclin-300. 1X AlphaLISA Universal Assay Buffer is used in the titration assay described below (Quality Control Protocol). Optimization of this assay buffer might be necessary in other assay types.
- Small volumes may be prone to evaporation. It is recommended to cover microplates with TopSeal-A Adhesive Sealing Film to reduce evaporation during incubation. Microplates are read with the TopSeal-A Film on the plate.
- Total signal varies with temperature and incubation time. For consistent results, identical incubation times and temperature should be used for all plates.
- The AlphaLISA signal is detected with an EnVision Multilabel Reader equipped with the ALPHA option using the AlphaScreen standard settings (e.g. Total Measurement Time: 550 ms, Excitation Time: 180 ms, Mirror: D640as, Emission Filter: M570w, Center Wavelength 570 nm, Bandwidth 100 nm, Transmittance 75%).

## Protocol:

This protocol is recommended for generating one titration curve in a 25  $\mu\text{L}$  final assay volume (12 concentrations, triplicate determinations with manual pipetting). If more assay points are needed, volumes should be adjusted accordingly.

### 1) Preparation of 1X AlphaLISA Universal Assay Buffer:

Add 1 mL of 5X AlphaLISA Universal Assay Buffer to 4 mL  $\text{H}_2\text{O}$ .

### 2) Preparation of 1.7X Biotin-6 His-tagged protein IgG dilutions:

Prepare 1.7X dilutions in 1X AlphaLISA Universal Assay Buffer as follows:

Tube	Volume of GST, 6 His-tagged	Volume of buffer ( $\mu\text{L}$ )	[GST, 6 His-tagged] (M) in 15 $\mu\text{L}$ (1.7X)	[GST, 6 His-tagged] (M) in final assay volume (25 $\mu\text{L}$ )
A	7 $\mu\text{L}$ of 37 $\mu\text{M}$	145	1.7E-6	1.0E-6
B	60 $\mu\text{L}$ of tube A	140	5.1E-7	3.0E-7
C	60 $\mu\text{L}$ of tube B	120	1.7E-7	1.0E-7
D	60 $\mu\text{L}$ of tube C	140	5.1E-8	3.0E-8
E	60 $\mu\text{L}$ of tube D	120	1.7E-8	1.0E-8
F	60 $\mu\text{L}$ of tube E	140	5.1E-9	3.0E-9
G	60 $\mu\text{L}$ of tube F	120	1.7E-9	1.0E-9
H	60 $\mu\text{L}$ of tube G	140	5.1E-10	3.0E-10
I	60 $\mu\text{L}$ of tube H	120	1.7E-10	1.0E-10
J	60 $\mu\text{L}$ of tube I	140	5.1E-11	3.0E-11
K	60 $\mu\text{L}$ of tube J	120	1.7E-11	1.0E-11
L	0	140	0	0

### 3) Preparation of 5X AlphaLISA Acceptor beads (100 $\mu\text{g}/\text{mL}$ ):

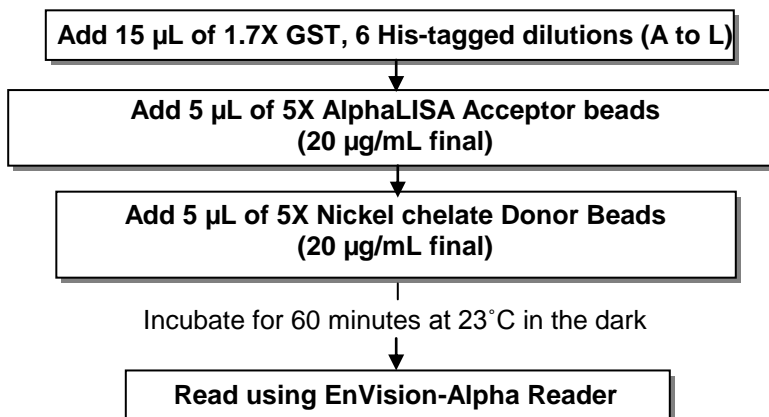
Add 5  $\mu\text{L}$  of 5 mg/mL AlphaLISA beads to 245  $\mu\text{L}$  of 1X AlphaLISA Universal Assay Buffer.

### 4) Preparation of 5X Streptavidin-coated Donor Beads (100 $\mu\text{g}/\text{mL}$ ):

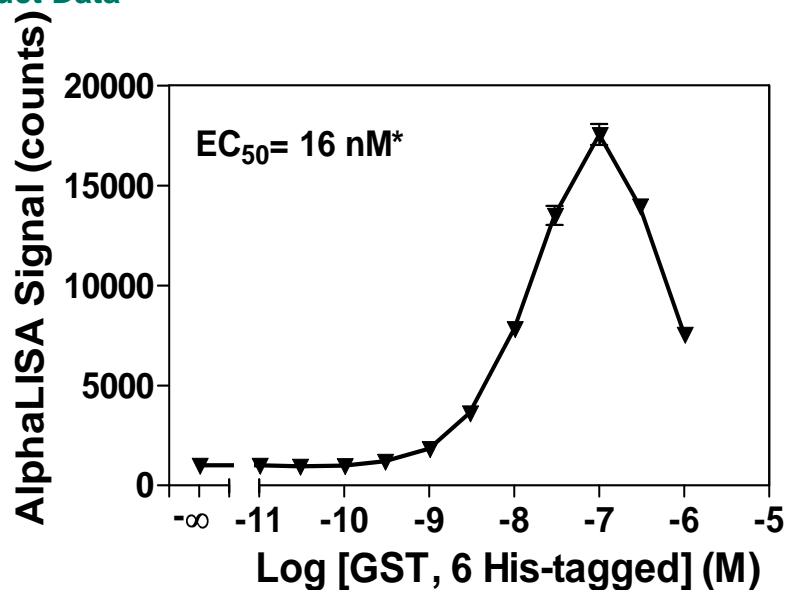
Keep the beads under subdued laboratory lighting.

Add 5  $\mu\text{L}$  of 5 mg/mL Nickel chelate Donor Beads to 245  $\mu\text{L}$  of 1X AlphaLISA Universal Assay Buffer.

### 5) In an OptiPlate-384 microplate:



## Typical Product Data



\* The EC<sub>50</sub> value was determined following a non-linear regression analysis using the sigmoidal dose-response curve model with variable slope. Only assay points up to the maximum signal were used for EC<sub>50</sub> determination (in this case, up to 100 nM).

## Suggested Materials and Instrumentation

Please visit our website

[www.perkinelmer.com/AlphaTech](http://www.perkinelmer.com/AlphaTech)

**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](http://www.perkinelmer.com)



For a complete listing of our global offices, visit [www.perkinelmer.com/ContactUs](http://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.