

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

## Anti-Mouse IgM AlphaLISA Acceptor Beads

**Product No.:** AL130C (250 µg)  
AL130M (5 mg)  
AL130R (25 mg)

**Lot No.:** P1

### Product Formats

Catalog #	Size	Volume	Assay Points*
AL130C	250 µg	50 µL	500
AL130M	5 mg	1 mL	10 000
AL130R	25 mg	5 mL	50 000

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

**Manufacturing Date:** March 01, 2011

### Product Information

**Description:** Anti-Mouse IgM AlphaLISA Acceptor beads at 5 mg/mL in PBS pH 7.2 with 0.05% Proclin-300 as a preservative. The antibody used is a rat monoclonal antibody.

**Application:** This product is intended for use in homogeneous AlphaLISA assays to capture mouse IgM immunoglobulins. Alpha Donor beads must be ordered separately.

**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.

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

### Quality Control

Lot-to-lot consistency is confirmed by a Quality Control AlphaLISA 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: 471 663 counts  
Minimum signal: 382 counts  
EC<sub>50</sub>: 0.054 nM

## Titration Assay (Quality Control Protocol)

This protocol provides a means to verify product performance. It is used as our Quality Control release test. The following reagents and materials are used:

Item	Suggested Source	Catalog #
Streptavidin Alpha Donor beads	PerkinElmer	6760002S (1 mg) 6760002 (5 mg) 6760002B (50 mg)
Biotinylated Mouse IgM	BD Pharmingen	553473
AlphaLISA Universal Assay Buffer, 5X	PerkinElmer	AL001C (10 mL) AL001F (100 mL)
White OptiPlate™-384	PerkinElmer	6007290
TopSeal™-A Adhesive Sealing Film	PerkinElmer	6005185
EnSpire® or EnVision Multilabel Alpha Reader	PerkinElmer	-

## Recommendations

- The volume indicated on each tube is guaranteed for single pipetting. Multiple pipetting of the reagents may reduce the theoretical amount left in the tube. To minimize loss when pipetting beads, it is preferable not to prewet the tip.
- Alpha Donor beads are light-sensitive. All steps using the Alpha Donor beads should be performed under subdued laboratory lighting (< 100 lux). Green filters (Roscolux filters #389 from Rosco, or the equivalent) can be applied to light fixtures. All the other assay reagents can be used under normal light conditions.
- Sodium azide should not be added to stock reagents. High concentrations of sodium azide (> 0.001 % final in the assay) might decrease the AlphaLISA signal.
- Centrifuge the 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 Assay Buffer.
- When diluting the probe, change tips after each dilution. When loading reagents in the assay microplate, change tips after each reagent addition and between each set of reagents.
- When reagents are added in the microplate, make sure the liquids are at the bottom of the well.
- 1X AlphaLISA Universal Assay Buffer contains PBS, pH 7.5, 0.1% BSA, 0.01% Proclin-300. This buffer is used in the titration assay described below (Quality Control Protocol). Optimization of the 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 Alpha-enabled EnSpire or EnVision Multilabel Reader using the AlphaScreen standard settings (e.g. Total Measurement Time: 550 ms, Laser 680 nm, Excitation Time: 180 ms, Mirror: D640as, Emission Filter: M570w, Center Wavelength 570 nm, Bandwidth 100 nm, Transmittance 75%).

## Quality Control Protocol

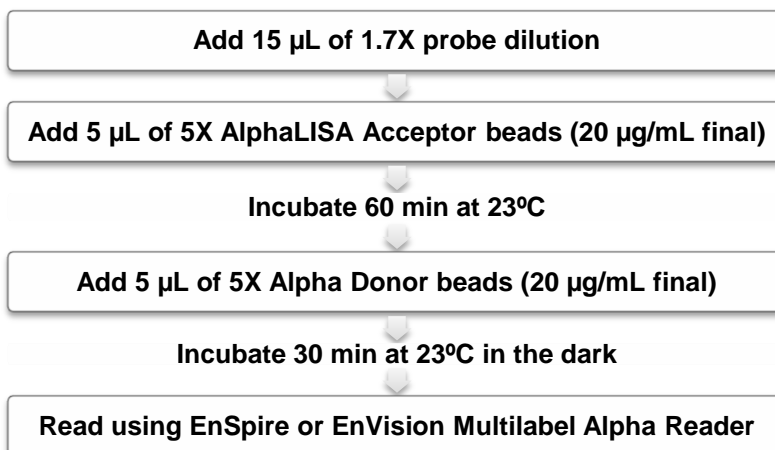
This titration protocol is designed for 12 dilutions of the probe with triplicate determinations. Final concentration of AlphaLISA Acceptor and Alpha Donor beads in the 25  $\mu$ L final assay volume is 20  $\mu$ g/mL. Volume of diluted reagents should be adjusted according to total number of assay points, plate format or assay volume.

- Preparation of 1X AlphaLISA Universal Assay Buffer:  
Add 1 mL of 5X AlphaLISA Universal Assay Buffer to 4 mL H<sub>2</sub>O.
- Preparation of 1.7X probe (Biotinylated Mouse IgM) dilutions:  
Dilute probe to a 556 nM stock solution.  
Prepare dilution series in 1X AlphaLISA Universal Assay Buffer as follows, changing tip for each dilution:

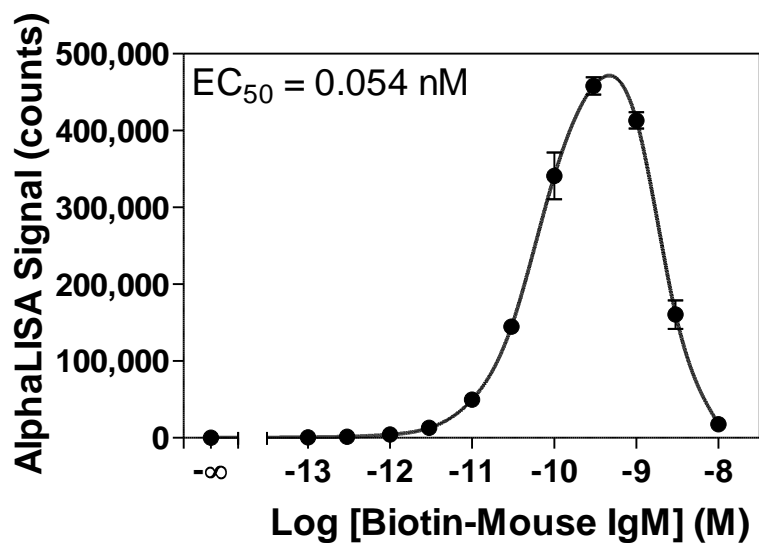
Tube	Volume of Probe	Volume of 1X Buffer ( $\mu$ L)	[Biotinylated Mouse IgM] (M)	
			in 15 $\mu$ L (1.7X)	in 25 $\mu$ L Final Assay Volume
A	5 $\mu$ L of 556 nM	157	1.7E-08	1.0E-08
B	60 $\mu$ L of tube A	140	5.1E-09	3.0E-09
C	60 $\mu$ L of tube B	120	1.7E-09	1.0E-09
D	60 $\mu$ L of tube C	140	5.1E-10	3.0E-10
E	60 $\mu$ L of tube D	120	1.7E-10	1.0E-10
F	60 $\mu$ L of tube E	140	5.1E-11	3.0E-11
G	60 $\mu$ L of tube F	120	1.7E-11	1.0E-11
H	60 $\mu$ L of tube G	140	5.1E-12	3.0E-12
I	60 $\mu$ L of tube H	120	1.7E-12	1.0E-12
J	60 $\mu$ L of tube I	140	5.1E-13	3.0E-13
K	60 $\mu$ L of tube J	120	1.7E-13	1.0E-13
L	0	140	0	0

- Preparation of 5X AlphaLISA Acceptor beads (100  $\mu$ g/mL):  
Add 5  $\mu$ L of 5 mg/mL AlphaLISA Acceptor beads to 245  $\mu$ L of 1X AlphaLISA Universal Assay Buffer.
- Preparation of 5X Alpha Donor beads (100  $\mu$ g/mL):  
Keep the beads under subdued laboratory lighting.  
Add 5  $\mu$ L of 5 mg/mL Alpha Donor beads to 245  $\mu$ L of 1X AlphaLISA Universal Assay Buffer.

5) In a white opaque OptiPlate-384 microplate:



## Typical Product Data



Titration assay using the Quality Control protocol. Signal was detected with an EnVision Alpha instrument 2102.

## Specificity:

Specificity of Anti-Mouse IgM AlphaLISA Acceptor beads was tested in the Titration Assay using the following biotinylated proteins. The results are expressed as a percentage of maximal signal obtained in the Titration Assay using biotinylated Mouse IgM at 0.34 nM.

Biotinylated protein	% Signal
Rabbit IgM	0%
Rat IgM	0%
Human IgM	0%
Mouse IgA	0%
Mouse IgG1	0%
Mouse IgG2a	0%
Mouse IgG2b	0%
Mouse IgG2c	0%
Mouse IgG3	0%
Mouse IgE	0%

Please visit our website for additional information on the AlphaLISA technology at [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 ©2011, PerkinElmer, Inc. All rights reserved. PerkinElmer® is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.