

Latest Alpha Development: From AlphaScreen to AlphaLISA to AlphaPlex in 5 minutes

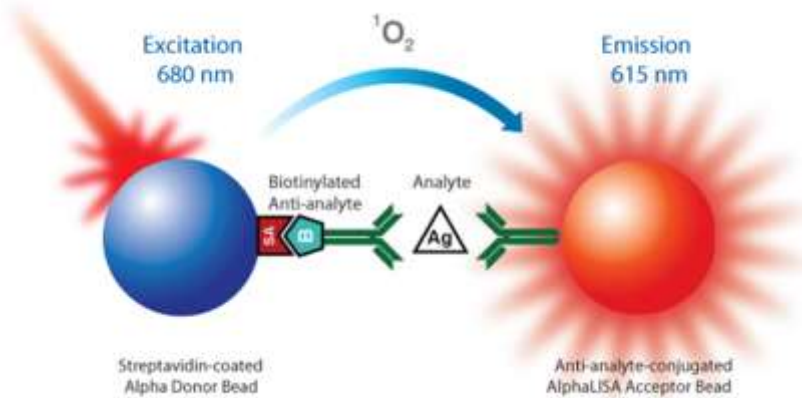
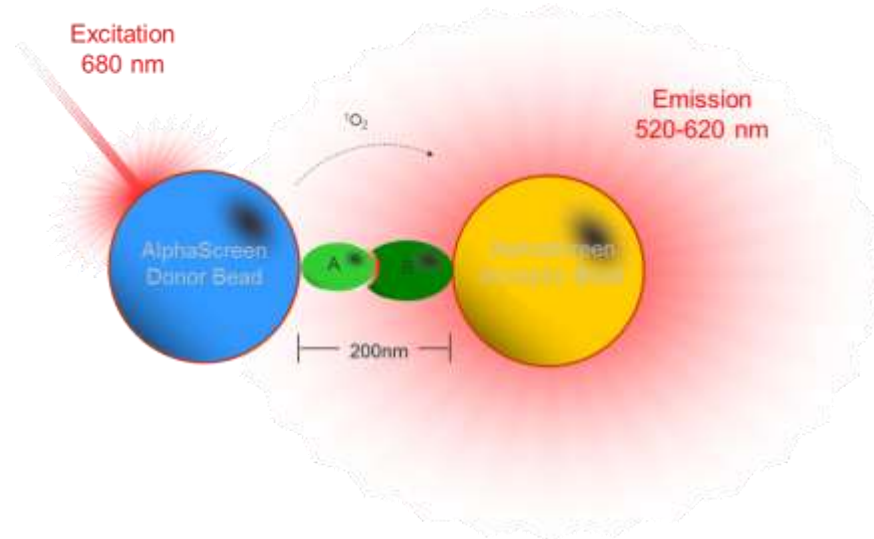
ELRIG Drug Discovery Meeting Telford 2015

Alan Fisher, Field Application Scientist, PerkinElmer
September 2015



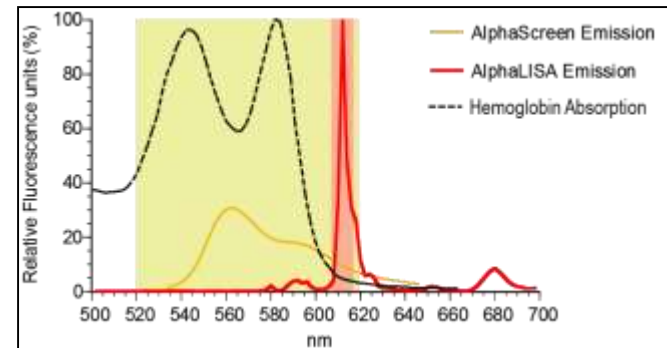
HUMAN HEALTH • ENVIRONMENTAL HEALTH

Alpha Technology



- AlphaScreen

- No Wash, Homogenous
- 1-2 Hours
- Wide Dynamic Range
- Very Sensitive
- Miniaturised
- Low Sample Volume



- AlphaLISA

- Serum & Plasma Samples

AlphaScreen – Kits & Tool Box

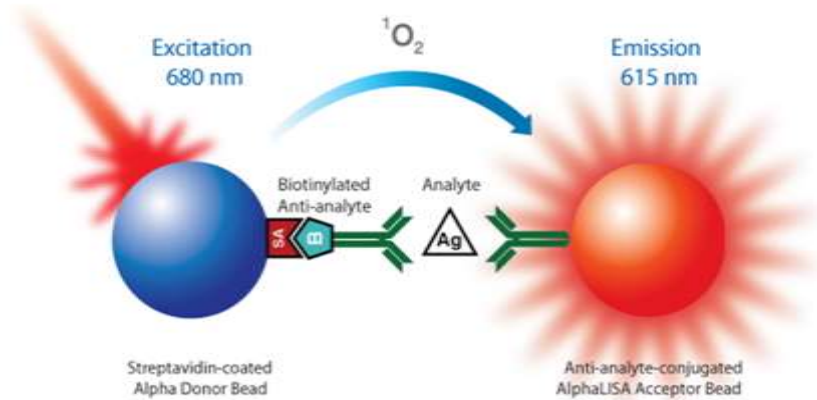
AlphaScreen Beads

Product Description	Part Number	Part Number	Part Number
AlphaScreen Kits and Kit Components			
	500 data points	10K data points	50K data points
AlphaScreen cAMP-Biotin Supplement		6760301M	6760301R
Biotinylated HIS TAG		6760303M	
Biotinylated GST		6760305M	
Antibody-free PhosphoSensor Kit	6760307D	6760307M	6760307R
cGMP Sup + Antibody		6760308M	6760308R
PY20 Assay Kit	6760601C	6760601M	6760601R
PT66 Assay Kit	6760602C	6760602M	6760602R
Anti-GST Assay Kit	6760603C	6760603M	6760603R
Anti-DIG Assay Kit	6760604C	6760604M	6760604R
Anti-FITC Assay Kit	6760605C	6760605M	6760605R
Anti-mIgG Assay Kit	6760606C	6760606M	6760606R
Anti-rIgG Assay Kit	6760607C	6760607M	6760607R
Anti-c-MYC Assay Kit	6760611C	6760611M	6760611R
Anti-HA Assay Kit	6760612C	6760612M	6760612R
Anti-FLAG® Assay Kit	6760613C	6760613M	6760613R
Protein A Assay Kit	6760617C	6760617M	6760617R
Nickel Chelate Assay Kit	6760619C	6760619M	6760619R
PTyr100 Assay Kit	6760620C	6760620M	6760620R
	1,000 data points	10,000 data points	50,000 data points
AlphaScreen Omnibeads	6760626D	6760626M	6760626R

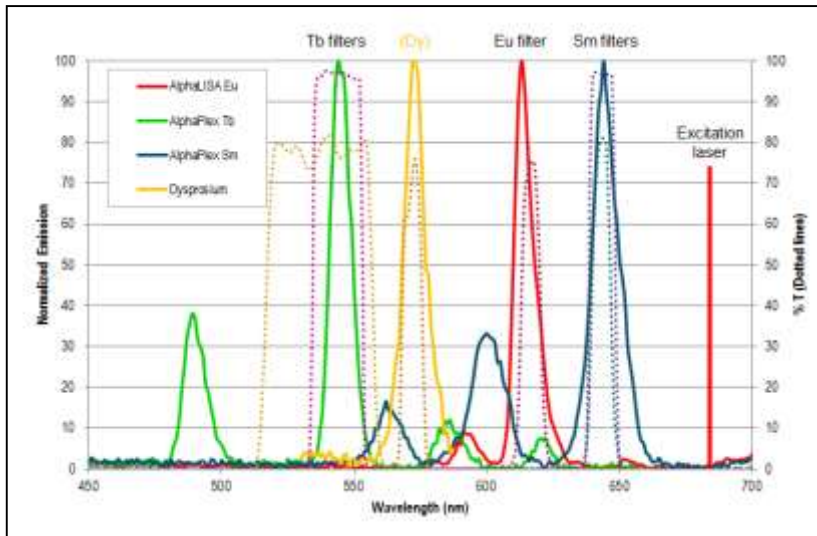
AlphaLISA – Kits & Tool Box – 80 NPIs 2015

Angiogenesis	Biologics & Bioprocess		Cancer	Cardiovascular
VEGFA (AL201)	CHO-P (AL210)	Residual Protein A (AL287)	AFP (AL230)	Alpha-2 Macroglobulin (min I)
AlphaLISA Acceptor Beads				
	Product Description	Part Number	Part Number	Part Number
		1 mg	5 mg	50 mgs
	Nickel Chelate Acceptor Beads	AL108C	AL108M	AL108R
	Glutathione Acceptor Beads	AL109C	AL109M	AL109R
	Anti-GST Acceptor Beads	AL110C	AL110M	AL110R
	Anti-c-myc Acceptor Beads	AL111C	AL111M	AL111R
	Anti-FLAG® Acceptor Beads	AL112C	AL112M	AL112R
	Anti-DIG Acceptor Beads	AL113C	AL113M	AL113R
	Streptavidin Acceptor Beads	AL125C	AL125M	AL125R
	Anti-FITC Acceptor Beads	AL127C	AL127M	AL127R
	Anti-6xHis Acceptor Beads	AL128C	AL128M	AL128R
	Anti-V5 Acceptor Beads	AL129C	AL129M	AL129R
	Anti-GFP Acceptor Beads	AL133C	AL133M	AL133R
	Anti-Maltose-Binding Protein (MBP) Acceptor Beads	AL134C	AL134M	AL134R
	Strep-Tactin® Acceptor Beads	AL136C	AL136M	AL136R
	LCA AlphaLISA Acceptor Beads	AL140C	AL140M	AL140R
	Immunoglobulin E (anti-mouse) Acceptor Beads	AL161C	AL161M	AL161R
	Immunoglobulin M (anti-mouse) Acceptor Beads	AL162C	AL162M	AL162R
	Immunoglobulin G1 (anti-mouse) Acceptor Beads	AL157C	AL157M	AL157R
	Immunoglobulin G2a (anti-mouse) Acceptor Beads	AL158C	AL158M	AL158R
	Immunoglobulin G2b (anti-mouse) Acceptor Beads	AL159C	AL159M	AL159R
	Immunoglobulin G3 (anti-mouse) Acceptor Beads	AL160C	AL160M	AL160R

AlphaPlex - Multiplexing Technology



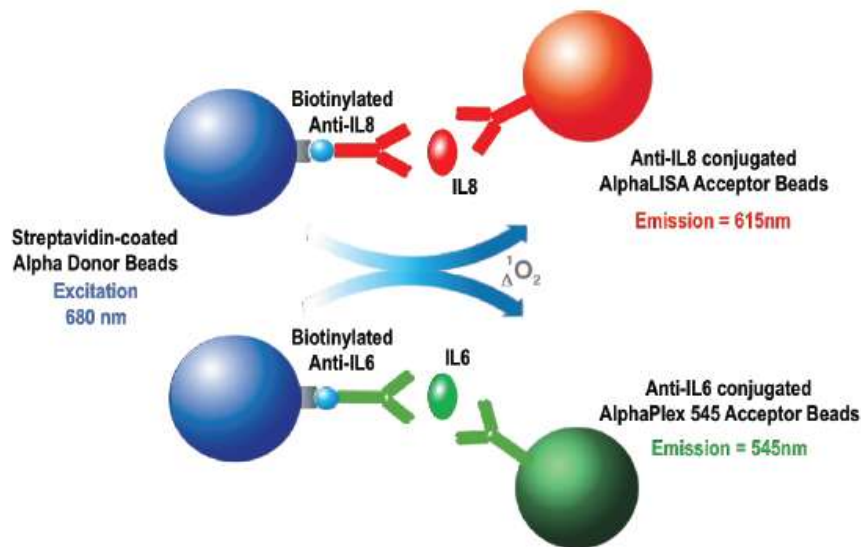
- AlphaLISA
 - uses Lanthanide Europium Beads



- AlphaPlex
 - Can use other Lanthanides
 - Terbium
 - Samarium
 - Dysprosium
 - With Europium

AlphaPlex - Multiplexing Technology

- Applications with AlphaPlex
 - Biomarkers for PD/PK
 - Biomarkers for stem cells
 - Kinase: total vs phosphorylated protein
 - Epigenetic markers: total histone vs specific marker
 - Amyloid peptides
 - IgG profiling / testing
 - Assay normalization with housekeeping proteins
 - e.g. IL6/IL8, P Tau/Total Tau, IL6/IL-1b, H2a K119Ub/Total H2a



AlphaPlex - Kits and Tool Box - Publications

AlphaPlex-645 Detection Kits:

- Human IL-1 β
- Human IL-2
- Human IL-17
- Human Insulin
- Human IFN- γ
- Human IP-10
- Human TNF α
- TruHits kits

AlphaPlex-645 Toolbox Acceptor Beads:

- Streptavidin
- Anti-6X His
- Anti-FLAG
- Protein A
- Anti-Human IgG
- Anti-mouse IgG
- Anti-rabbit IgG
- Unconjugated

AlphaPlex-545 Detection Kits:

- Human IL-1 β
- Human IL-2
- Human IL-6
- Human IL-17
- Human / Rat IL-22
- Human Insulin
- Human IFN- γ
- Human IP10
- Human TNF α
- TruHits kits

AlphaPlex-545 Toolbox Acceptor Beads:

- Streptavidin
- Anti-6X His
- Glutathione
- Anti-FLAG
- Anti-HA (hemagglutinin)
- Protein A
- Anti-Human IgG
- Anti-Mouse IgG
- Anti-Rabbit IgG
- Anti-unmodified H3K4
- Unconjugated

- For more details please visit us at our Booth

