

# INNOVATIVE SOLUTIONS IN VIROLOGY RESEARCH



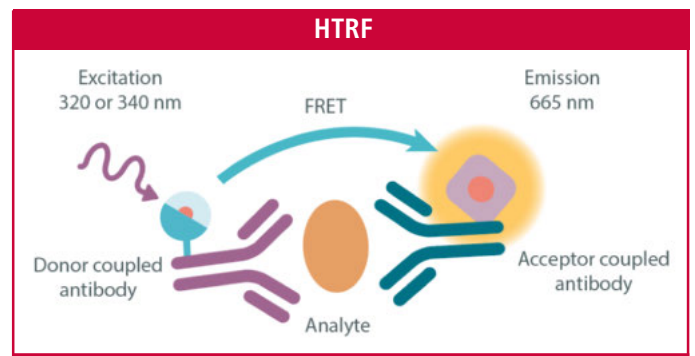
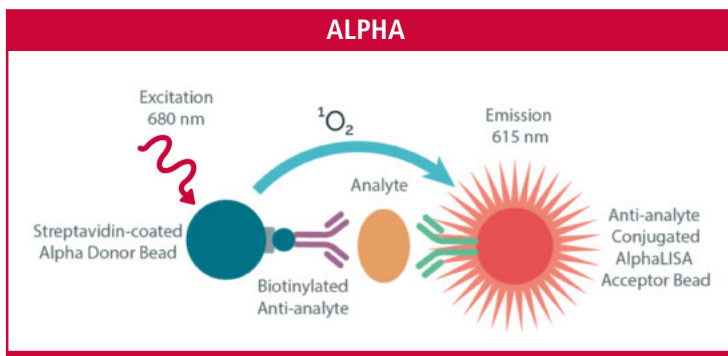
cisbio

## ALPHA TECHNOLOGY

Alpha is a versatile, bead-based platform that enables you to assay the most complex samples in one well and with no wash steps.

## HTRF ASSAYS

Our HTRF<sup>®</sup> assays are fast, sensitive, homogeneous, and ready to use with no wash steps.



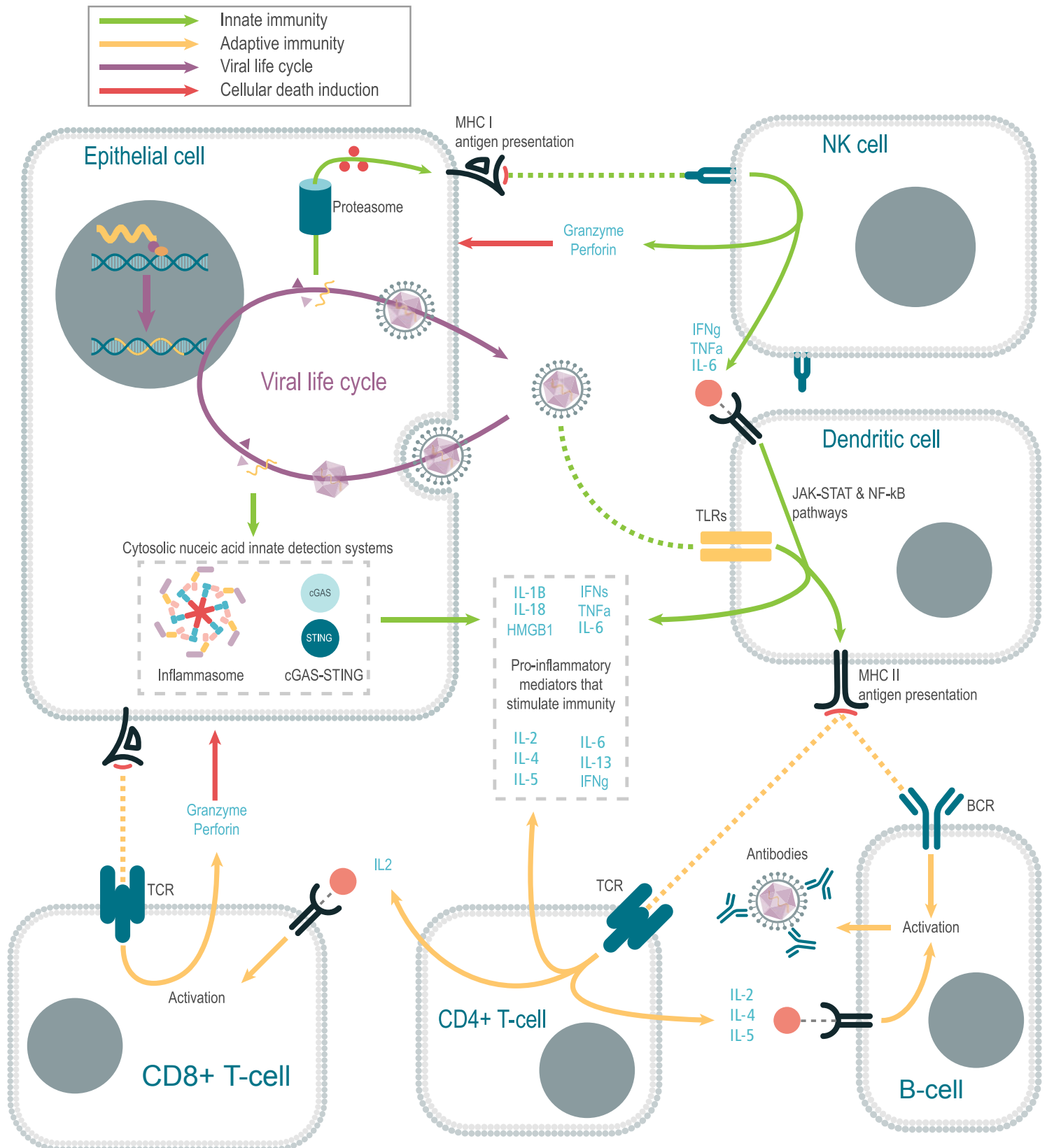
## PerkinElmer also provides luminescence assays based of firefly luciferase.

- Britelite™ plus, neolite™ and steadylite plus high to ultra high sensitivity [reporter gene](#) assay systems
- Cytotoxicity/cell proliferation assays based on [ATP monitoring](#) to assess the cytotoxic, cytostatic and proliferative effects of a wide range of drugs, biological response modifiers and biological compounds (ATPlite technology).

*\*Click on underlined text for more information.*



# ANTIVIRAL IMMUNE RESPONSE AND IMMUNIZATION STRATEGIES



# AVAILABLE PRODUCTS

*Table 1. Viral detection assay.*

Virus quantification AlphaLISA kits 500 test	Part #
HIV p24 (high sensitivity)	AL291C
Hepatitis B Virus e Antigen (HBeAg)	AL3082HV
Hepatitis B Virus s Antigen (HBsAg)	AL3083HV
HCV cAg (hepatitis C virus core antigen)	AL3092HV
Influenza A Nucleoprotein	AL3084HV
Viral double-stranded RNA detection products	Part #
Viral double-stranded RNA detection kit 500 test	64RNAPEG
Viral double-stranded RNA detection kit standard	64RNATDA
Lysis buffer 16 mL	64B4FDD

*Table 2. Key cytokines.*

Key Cytokines 500 tests	HTRF	AlphaLISA
IL-1b	62HIL1BPEG	AL220C
IL-2	62HILO2PEG	AL333C
IL-6	62HILO6PEG	AL3025C
IL10	62HIL10PEG	AL218C
IL-13		AL240C
IL-18	62HIL18PEG	AL241C
HMGB1	62HMGPEG	
TNF- $\alpha$	62HTNFAPEG	AL208C
IFN- $\alpha$	62HIFNAPEG	AL217C
IFN- $\beta$	62HIFNBPEG	AL3133C
IFN $\gamma$	62HIFNGPEG	AL217C
IFN- $\lambda$ 2		AL3031C
TGF $\beta$ -1	62HTGFBPEG	AL336C

*Table 3. COVID-19 cytokine storm.*

COVID-19 cytokine storm assays 500 tests	HTRF	AlphaLISA
IL-6	62HILO6PEG	AL223C
C Reactive Protein		AL233C

## AVAILABLE PRODUCTS (continued)

Table 4. Innate antiviral immunity.

Pathways	Assay 500 tests	HTRF	AlphaLISA SureFire Ultra or AlphaScreen SureFire
TLR	IRAK3	63ADK101PEG	
	IRAK4	63ADK108PEG	AL3117C
	JNK phospho T183/S185*	64JNKPEG	TGRJS500
	c-Jun phospho S73	64JUNPEG	TGRCJ2S500
	p38 MAPK phospho T180/Y182*	64P38PEG	ALSU-PP38-B500
cGAS-STING	STING phospho S366*	64STGPEG	
	Human STING WT binding kit	64BDSTGPEG	
	Mouse STING WT binding kit	64BDSTGMPEG	
	Human AQ STING binding kit	64BDSTGQPEG	
	Human H232 STING binding kit	64BDSTGHPEG	
	p62		AL3097C
	p62/SQSTM1 phospho S403*	64P62S4PEG	
TLR/ cGAS-STING/ Inflammasome/ NF-kB	TBK1 phospho S172*	64TBKPEG	ALSU-PTBK1-A500
	IRF3 phospho S385/386	6FRF3PEG	
	Ikkα phospho S176/180		ALSU-PIKKA-A500
	Ikkβ phospho S177/181	64KKBPEG	TGRKBS500
	NF-kB	64NFBPEG	ALSU-PNFKB-A500
JAK-STAT	STAT1 phospho Y701*	63ADK026PEG	ALSU-PST1-A500
	STAT1 phospho S727*		ALSU-PST1-B500
	STAT3 phospho Y705*	62AT3PEG	ALSU-PST3-A500
	STAT4 phospho Y693		ALSU-PST4-A500
	STAT5 phospho Y694	64AT5PEG	
	STAT5 phospho Y694/699*		ALSU-PST5-B500
	STAT6 phospho Y641		ALSU-PST6-A500

\*Available in phospho- and total protein format

Table 5. Viral neutralization assays.

Reporter gene reagents	PART #
Britelite Plus*	606676*
neolite*	601671*
steadylite Plus*	606675*

\*Exists in 10/100/1,000 mL

Table 7. Viral neutralization assays.

Fluorescence assays 500 tests	HTRF	Alpha
pH2AX	64H2XPEG	ALSU-PH2X-A500
Cleaved PARP	64PARPEG	

Table 6. Cytotoxicity and viability assays.

Luminescence assays	Part #
ATPlite 1step	6016736*
ATPlite	6016943**

\*Exists in 10/100/1,000 mL; \*\*Exists in 300/1,000/5,000/10,000 tests

## AVAILABLE PRODUCTS (continued)

**Table 8 (A). Adaptive antiviral immunity.**

T-cell activation pathway 500 tests	HTRF	AlphaLISA <i>SureFire Ultra</i> or AlphaScreen <i>SureFire</i>
ZAP70 phospho Y319*	64ZAPPEG	ALSU-PZAP-A500
SLP76 phospho S376*	63ADK076PEG	ALSU-PSLP-A500
ERK1/2 phospho T202/Y204*	64AERPEG	ALSU-PERK-A500
CREB phospho S133*	64CREPEG	ALSU-PCREB-A500
SHP1 phospho Y536*		ALSU-PSHP1-A500
SHP1 phospho Y564*	64SH1PEG	ALSU-PSHP1-B500
SHP2 phospho Y542*	64SH2PEG	ALSU-PSHP2-A500
SHP2 phospho Y580*		ALSU-PSHP2-B500
JNK phospho T183/S185*	64JNKPEG	
c-Jun phospho S73	64JUNPEG	TGRCJ2S500
NF-kB p65 phospho S536*	64NFBPEG	ALSU-PNFKB-A500
mTOR phospho S2448	64TORPEG	ALSU-PMTOR-C500
mTOR phospho S2481		ALSU-PMTOR-B500

\*Available in phospho- and total protein format

**Table 8 (B). Adaptive antiviral immunity.**

B-cell activation pathway 500 tests	HTRF	AlphaLISA <i>SureFire Ultra</i> or AlphaScreen <i>SureFire</i>
SYK phospho Y352*		ALSU-PSYK-B500
SYK phospho Y525/526*	64SYKY525PEG	ALSU-PSYK-A500*
BTK phospho Y223*	63ADK017PEG	ALSU-PBTK-A500
BTK phospho Y551*		ALSU-PBTK-B500
ERK1/2 phospho T202/Y204*	64AERPEG	ALSU-PERK-A500
JNK phospho T183/S185*	64JNKPEG	TGRJS500
c-Jun phospho S73	64JUNPEG	TGRCJ2S500
NF-kB p65 phospho S536*	64NFBPEG	ALSU-PNFKB-A500

\*Available in phospho- and total protein format

## AVAILABLE PRODUCTS (continued)

Table 9. Selected kits and reagents for immunoglobulin detection.

AlphaLISA detection kits	AlphaLISA Acceptor Beads	HTRF kits	HTRF labeled antibodies
IgM (bovine)	Anti-Bovine IgA Acceptor Beads	Human Fc	PAb Anti Human IgG-Eu cryptate
IgG1(bovine)	Anti-Bovine IgG Acceptor Beads	Human IgG	PAb Anti Human IgG-Tb cryptate
IgG2 (bovine)	Anti-Bovine IgG1 Acceptor Beads	Human IgG Kappa	Pab Anti Human IgG-d2
IgE (mouse)	Anti-Bovine IgG2 Acceptor Beads	Human IgG Lambda	PAb Anti Human IgG-XL665
IgG (human)	Anti-Bovine IgGM Acceptor Beads	Mouse Fc	MAB Anti Human Kappa-Eu cryptate
IgG (pan mouse)	Anti-Chicken IgY Acceptor Beads	Rabbit Fc	MAB Anti Human Kappa-d2
IgG Fc (human)	Anti-Goat (Fc-specific) Acceptor Beads		PAb Anti Mouse IgG-Eu cryptate
IgG (mouse)	Anti-Human (Fc-specific) Acceptor Beads		PAb Anti Mouse IgG-Tb cryptate
IgG1 (human)	Anti-Human IgE Acceptor Beads		Pab Anti Mouse d2
IgG1 (mouse)	Anti-Human (Fab specific) IgG Acceptor Beads		PAb Anti Mouse IgG-XL665
IgG2a (mouse)	Anti-Human IgG1 Acceptor Beads		PAb Anti Rabbit IgG-Eu cryptate
IgG2b (mouse)	Anti-Human IgG2 Acceptor Beads		PAb Anti Rabbit IgG-Tb cryptate
IgG3 (mouse)	Anti-Human IgG4 Acceptor Beads		PAb Anti Rabbit IgG-d2
IgG4 (human)	Anti-Human IgGE Acceptor Beads		PAb Anti Rabbit IgG-XL665
IgM (human)	Anti-Mouse (Fc-specific) IgG Acceptor Beads		Protein A-Eu cryptate
IgM (mouse)	Anti-Mouse IgG Acceptor Beads		Protein A-XL665
Kappa light chain	Anti-Mouse IgG1 Acceptor Beads		
	Anti-Mouse IgG2a Acceptor Beads		
	Anti-Mouse IgG2b Acceptor Beads		
	Anti-Mouse IgG3 Acceptor Beads		
	Anti-Mouse IgGM Acceptor Beads		