CELL CULTURE

REPORTER CELL LINES

Highlighted signaling pathways

- PRR, Transcription Factor, Cytokine, Autophagy
- Thoroughly tested for viability and biological activity
- Compatible with High-Throughput Screening

InvivoGen offers a large panel of cell lines that are stably transfected with innate immunity-specific pathway reporter contructs. Our cells express one or two reporter proteins, the secreted embryonic alkaline phosphatase (SEAP) and/or the Lucia luciferase. Both systems offer the great advantage of being secreted outside the cell, allowing for multiple and non-destructive readings over time. InvivoGen has developed easy-to-use detection reagents: QUANTI-Blue™ for SEAP monitoring using a spectrophotometer, and QUANTI-Luc™ for Lucia luciferase monitoring with a luminometer.

Recombinant cells of various origins

HEK293-derived cells

THP-1 human monocytes

RAW 264.7 mouse macrophages

Jurkat human T lymphocytes

A549 human lung carcinoma

and more....

WWW.INVIVOGEN.COM/REPORTER-CELLS

InvivoGen

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Reporter cell lines

InvivoGen's expanding cell line collection is designed to provide **a rapid, sensitive and reliable** method to investigate cell signaling pathways and signal transduction related to innate immunity. We bring you unique tools to screen and validate agonists/antagonists of pattern recognition receptors (PRR), assess the activation of transcription factors in cells of different tissue origin, detect bioactive cytokines, or monitor autophagy.

Our cell lines are stably transfected with reporter constructs encoding the **secreted embryonic alkaline phosphatase (SEAP)** or **secreted Lucia luciferase** gene downstream of a response element that is specific for the signaling pathway being studied. Activation of the signaling pathway leads to the nuclear translocation of the transcription factor, and its binding to the response element induces the production of the reporter protein. To facilitate readout of reporter activities, InvivoGen has developed easy-to-use detection reagents. **HEK-Blue Detection™** and **QUANTI-Blue™** allow the monitoring of SEAP using a spectrophotometer, while **QUANTI-Luc™** can be used with a luminometer to measure Lucia activity. **Dual™ reporter** cell lines are available for double readout with both SEAP and Lucia luciferase.

InvivoGen also provides a series of reporter cell lines with specific **knock-out (KO)** or **knock-down** PRR or signaling genes, and cell lines with **knock-in** reporters under control of endogenous promoters.

PRR Reporter cells

C-type lectin receptors (CLR)
Stable Dectin and Mincle transfectants

NOD-like receptors (NLR)
Stable NOD transfectants

Toll-like receptors (TLR)
Stable TLR transfectants

Dual™ : NF-κB SEAP transfected and Lucia knocked in IL-8 gene

Cytosolic DNA sensors
Stable STING variants transfectants

Dual™ : ISRE SEAP transfected and Lucia knocked in IFN-β gene

Inflammasome test cells
Stable ASC::GFP transfectants

ASC, Caspase-1 or NLRP3 knocked down

Transcription factor Reporter cells

Human cells
NF-κB, AP-1, IRF, NFAT, or Dual™ reporters

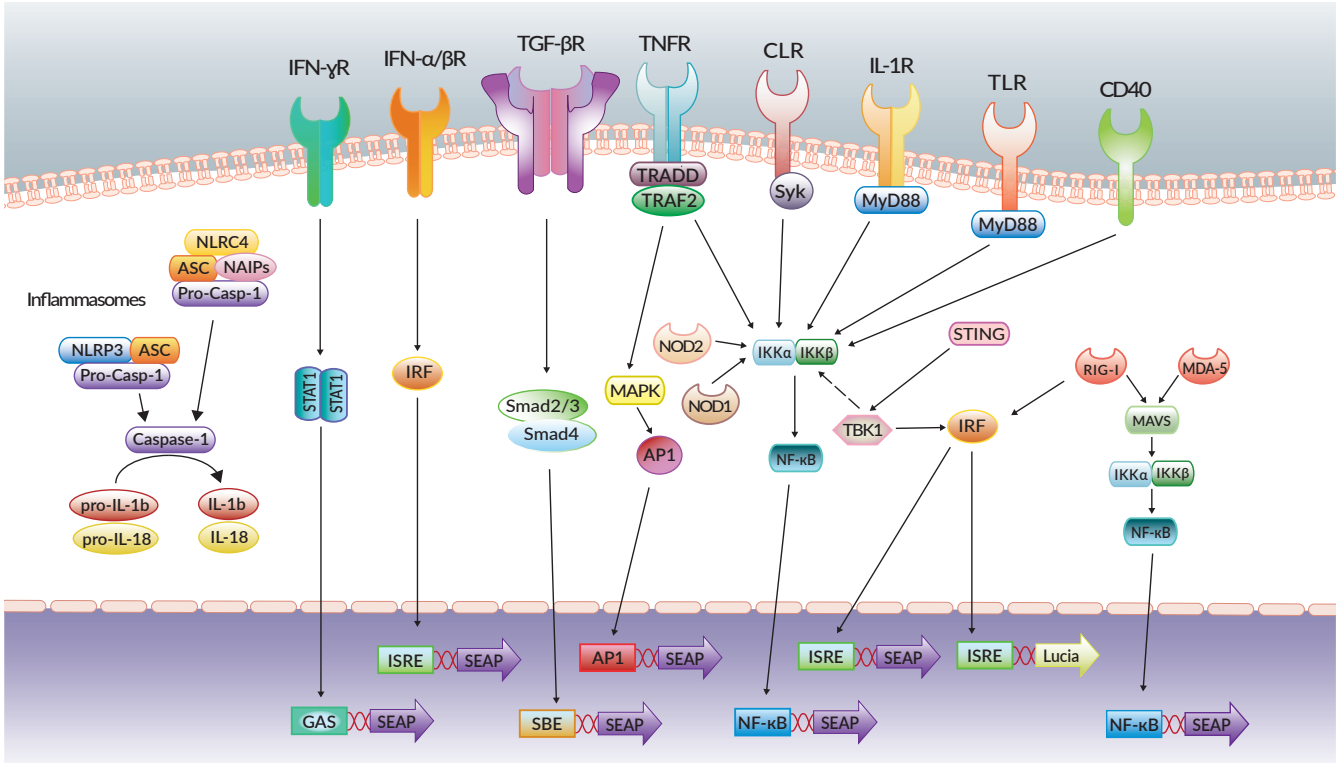
A549 lung carcinoma, HCT116 colon carcinoma, HEK293 human embryonic kidney, J774.1 macrophages, Jurkat T lymphocytes, Ramos B lymphocytes, THP-1 monocytes

Mouse cells
NF-κB, AP-1, IRF, or Dual™ reporters

B16 melanoma, RAW 264.7 macrophages

Cytokine Reporter cells
Stable reporter transfectants

Autophagy Reporter cells
Stable RFP::GFP::LC3 transfectants



Simplified signaling pathways leading to transcription factor translocation to the nucleus and expression of the reporter genes. Examples of PPR, cytokine receptors, and canonical inflammasomes are shown. For detailed signaling pathways, please visit www.invivogen.com.

PRR reporter cells

CELL LINE	PRODUCT	DESCRIPTION	REPORTER	CAT. CODE
CLR REPORTER CELLS				
HEK293	HEK-Blue™ hDectin-1b	Human Dectin-1b / NF-κB-reporter cells	SEAP	hkb-hdect1b
	HEK-Blue™ mDectin-2	Mouse Dectin-2 / NF-κB-reporter cells	SEAP	hkb-mdect2
	HEK-Blue™ mMincle	Mouse Mincle / NF-κB-reporter cells	SEAP	hkb-mmcl
NOD REPORTER CELLS				
HEK293	HEK-Blue™ hNOD1	Human NOD1 / NF-κB-reporter cells	SEAP	hkb-hnod1
	HEK-Blue™ hNOD2	Human NOD2 / NF-κB-reporter cells	SEAP	hkb-hnod2
	HEK-Blue™ mNOD1	Mouse NOD1 / NF-κB-reporter cells	SEAP	hkb-mnod1
	HEK-Blue™ mNOD2	Mouse NOD2 / NF-κB-reporter cells	SEAP	hkb-mnod2
TLR REPORTER CELLS				
HEK293	HEK-Blue™ hTLR2	Human TLR2 / NF-κB-reporter cells	SEAP	hkb-htlr2
	HEK-Blue™ hTLR3	Human TLR3 / NF-κB-reporter cells	SEAP	hkb-htlr3
	HEK-Blue™ hTLR4	Human TLR4-MD2-CD14 / NF-κB-reporter cells	SEAP	hkb-htlr4
	HEK-Blue™ hTLR5	Human TLR5 / NF-κB-reporter cells	SEAP	hkb-htlr5
	HEK-Blue™ hTLR7	Human TLR7 / NF-κB-reporter cells	SEAP	hkb-htlr7
	HEK-Blue™ hTLR8	Human TLR8 / NF-κB-reporter cells	SEAP	hkb-htlr8
	HEK-Blue™ hTLR9	Human TLR9 / NF-κB-reporter cells	SEAP	hkb-htlr9
	HEK-Blue™ mTLR2	Mouse TLR2 / NF-κB-reporter cells	SEAP	hkb-mtlr2
	HEK-Blue™ mTLR3	Mouse TLR3 / NF-κB-reporter cells	SEAP	hkb-mtlr3
	HEK-Blue™ mTLR4	Mouse TLR4-MD2-CD14 / NF-κB-reporter cells	SEAP	hkb-mtlr4
	HEK-Blue™ mTLR5	Mouse TLR5 / NF-κB-reporter cell	SEAP	hkb-mtlr5
	HEK-Blue™ mTLR7	Mouse TLR7 / NF-κB-reporter cells	SEAP	hkb-mtlr7
	HEK-Blue™ mTLR8	Mouse TLR8 / NF-κB-reporter cells	SEAP	hkb-mtlr8
	HEK-Blue™ mTLR9	Mouse TLR9 / NF-κB-reporter cells	SEAP	hkb-mtlr9
	HEK-Blue™ mTLR13	Mouse TLR13 / NF-κB-reporter cells	SEAP	hkb-mtlr13
	HEK-Dual™ hTLR2	Double readout (NF-κB / IL8) TLR2 human reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-htlr2ni
	HEK-Dual™ hTLR3	Double readout (NF-κB / IL8) TLR3 human reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-htlr3ni
	HEK-Dual™ hTLR5	Double readout (NF-κB / IL8) TLR5 human reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-htlr5ni
	HEK-Dual™ hTLR9	Double readout (NF-κB / IL8) TLR9 human reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-htlr9ni
	HEK-Dual™ mTLR4	Double readout (NF-κB / IL8) TLR4-MD2-CD14 mouse reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-mtlr4ni
	HEK-Dual™ mTLR7	Double readout (NF-κB / IL8) TLR7 human reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-mtlr7ni
STING VARIANT REPORTER CELLS				
HEK293	293T-Dual™ hSTING-A162	Double readout (ISRE / IFN-β) human reporter cells, Lucia knocked in IFN-β, A162 human STING transfected	SEAP / Lucia	293d-a162
	293T-Dual™ hSTING-H232	Double readout (ISRE / IFN-β) human reporter cells, Lucia knocked in IFN-β, H232 human STING transfected	SEAP / Lucia	293d-h232
	293T-Dual™ hSTING-R232	Double readout (ISRE / IFN-β) human reporter cells, Lucia knocked in IFN-β, R232 human STING transfected	SEAP / Lucia	293d-r232
	293T-Dual™ mSTING	Double readout (ISRE / IFN-β) human reporter cells, Lucia knocked in IFN-β, mouse STING transfected	SEAP / Lucia	293d-mstg
THP-1	THP1-Dual™ KI-hSTING-A162	Double readout (NF-κB / IRF) human reporter cells, A162 human STING knocked in	SEAP / Lucia	thpd-a162
	THP1-Dual™ KI-hSTING-H232	Double readout (NF-κB / IRF) human reporter cells, H232 human STING knocked in	SEAP / Lucia	thpd-h232
	THP1-Dual™ KI-hSTING-R232	Double readout (NF-κB / IRF) human reporter cells, R232 human STING knocked in	SEAP / Lucia	thpd-r232

PRR reporter cells

Coupled with their **parental cell lines**, InvivoGen's **KO reporter cells** are valuable tools for studying the function of genes involved in PRR and IFN signaling as well as for screening for molecules that activate these pathways. The **KO status of each cell line is thoroughly tested**: biallelic mutation/deletion is confirmed by PCR and DNA sequencing and reporter activity is validated by functional assays.

CELL LINE	PRODUCT	DESCRIPTION	REPORTER	CAT. CODE
KO REPORTER CELLS				
A549	A549-Dual™ KO-MDA5	Human NF-κB and IRF reporter cells, knocked out MDA-5	SEAP / Lucia	a549d-komda5
	A549-Dual™ KO-MAVS	Human NF-κB and IRF reporter cells, knocked out MAVS	SEAP / Lucia	a549d-komavs
	A549-Dual™ KO-RIG-I	Human NF-κB and IRF reporter cells, knocked out RIG-I	SEAP / Lucia	a549d-korigi
B16	B16-Blue™ ISG-KO-STING	Mouse IRF-reporter cells, knocked out STING	SEAP	bb-kostg
HEK293	HEK-Blue™ ISG-KO-STING	Human IRF-reporter cells, knocked out STING	SEAP	hkb-kostg
RAW	RAW-Lucia™ ISG-KO-cGAS	Mouse IRF-reporter cells, knocked out cGAS	Lucia	rawl-kocgas
	RAW-Lucia™ ISG-KO-IFI16	Mouse IRF-reporter cells, knocked out IFI16	Lucia	rawl-koif16
	RAW-Lucia™ ISG-KO-IRF3	Mouse IRF-reporter cells, knocked out IRF3	Lucia	rawl-koirf3
	RAW-Lucia™ ISG-KO-IRF7	Mouse IRF-reporter cells, knocked out IRF7	Lucia	rawl-koirf7
	RAW-Lucia™ ISG-KO-MAVS	Mouse IRF-reporter cells, knocked out MAVS (IPS-1)	Lucia	rawl-komavs
	RAW-Lucia™ ISG-KO-MDA5	Mouse IRF-reporter cells, knocked out MDA-5	Lucia	rawl-komda5
	RAW-Lucia™ ISG-KO-RIG-I	Mouse IRF-reporter cells, knocked out RIG-I	Lucia	rawl-korigi
	RAW-Lucia™ ISG-KO-STING	Mouse IRF-reporter cells, knocked out STING	Lucia	rawl-kostg
	RAW-Lucia™ ISG-KO-TBK1	Mouse IRF-reporter cells, knocked out TBK1	Lucia	rawl-kotbk
	RAW-Lucia™ ISG-KO-TREX1	Mouse IRF-reporter cells, knocked out T REX1	Lucia	rawl-kotrex
	RAW-Lucia™ ISG-KO-TRIF	Mouse IRF-reporter cells, knocked out TRIF	Lucia	rawl-kotrif
THP-1	THP1-Dual™ KO-cGAS	Human NF-κB and IRF reporter cells, knocked out cGAS	SEAP / Lucia	thpd-kocgas
	THP1-Dual™ KO-IFI16	Human NF-κB and IRF reporter cells, knocked out IFI16	SEAP / Lucia	thpd-koifi16
	THP1-Dual™ KO-IFNAR2	Human NF-κB and IRF reporter cells, knocked out IFNAR2	SEAP / Lucia	thpd-koifnar2
	THP1-Dual™ KO-MyD	Human NF-κB and IRF reporter cells, knocked out MyD88	SEAP / Lucia	thpd-komyd
	THP1-Dual™ KO-STING	Human NF-κB and IRF reporter cells, knocked out STING	SEAP / Lucia	thpd-kostg
	THP1-Dual™ KO-TREX1	Human NF-κB and IRF reporter cells, knocked out TREX1	SEAP / Lucia	thpd-kotrex
Ramos	Ramos-Blue™ KD-MyD	Human NF-κB / AP-1 reporter cells, knocked down MyD88	SEAP	rms-kdmyd

New cell lines coming soon

CLR Reporter	STING Variant Reporter	Inflammasome Reporter	Autophagy Reporter
HEK-Blue™ hDectin-1a	**THP1-Dual™ KI-hSTING-M155**	**THP1-HMGB1-Lucia™**	**THP1-Difluo™ hLC3**
Human Dectin-1a / NF-κB Reporter : SEAP	M155 human STING knocked in Reporter : SEAP / Lucia	Human HMGB1 - pyroptosis Reporter : Lucia	hLC3::GFP::RFP Reporter : GFP-RFP
HEK-Blue™ mDectin-1b	**THP1-Dual™ KI-hSTING-S154**		
Mouse Dectin-1b / NF-κB Reporter : SEAP	S154 human STING knocked in Reporter : SEAP / Lucia		

Parental and control cell lines are also available.
Please visit: **www.invivogen.com**

INFLAMMASOME test cells

Inflammasomes contain a member of the NOD-like receptor (NLR) family, such as NLRP3 and IPAF, by which they are defined. The NLR protein recruits the **inflammasome-adaptor protein ASC**, which in turn interacts with caspase-1 leading to its activation. Once activated, **caspase-1** promotes the maturation of **IL-1β** and **IL-18** and induces a pro-inflammatory form of cell death called **pyroptosis**. A number of inflammasomes have been described, including the NLRP1, NLRP3 and AIM2 inflammasomes. The **NLRP3** inflammasome is the most extensively studied and is also the most versatile. InvivoGen has developed a collection of THP-1 inflammasome test cells. THP-1 human monocytic cells express high levels of NLRP3, ASC and pro-caspase-1 and are the commonly used model cell line for studying inflammasome activation.

CELL LINE	PRODUCT	DESCRIPTION	REPORTER	CAT. CODE
INFLAMMASOME TEST CELLS				
THP-1	THP1-ASC-GFP	Human ASC speck reporter cells	GFP	thp-ascgfp
	THP1-defASC	Human inflammasome test cells, knocked down ASC	None	thp-dasc
	THP1-defCASP1	Human inflammasome test cells, knocked down Caspase-1	None	thp-dcasp1
	THP1-NLRC4	Human inflammasome test cells, NLRC4 transfected	None	thp-nlrc4
	THP1-defNLRP3	Human inflammasome test cells, knocked down NLRP3	None	thp-dnlp
	THP1-Null	Human positive control inflammasome test cells, express high levels of ASC, NLRP3 and pro-caspase-1	None	thp-null
HEK293	HEK-Blue™ IL-1β	Human IL-1β reporter cells (NF-κB / AP-1 pathway), responsive to human and mouse IL-1β	SEAP	hkb-il1b

TRANSCRIPTION FACTOR reporter cells

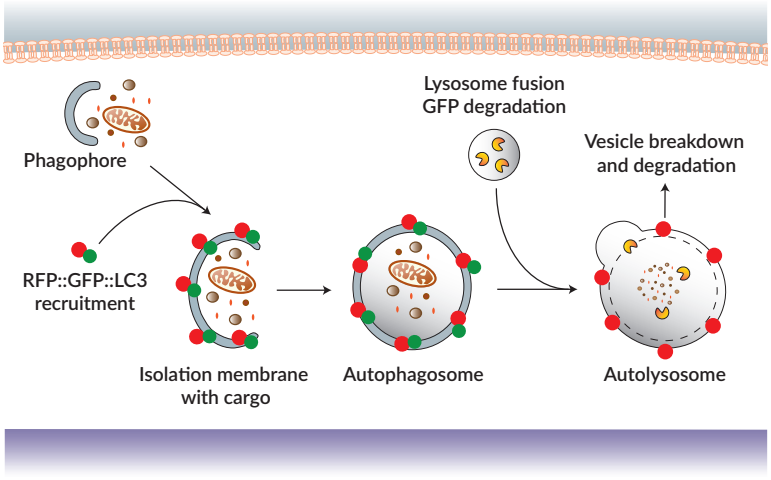
CELL LINE	PRODUCT	DESCRIPTION	REPORTER	CAT. CODE
HUMAN REPORTER CELLS				
A549	A549-Dual™	NF-κB and IRF lung carcinoma reporter cells	SEAP / Lucia	a549d-nfis
HCT116	HCT116-Dual™	NF-κB and IRF colon carcinoma reporter cells	SEAP / Lucia	hctd-nfis
HEK293	HEK-Blue™ ISG	IRF embryonic kidney reporter cells	SEAP	hkb-isg
	293T-Dual™ Null	Double readout (ISRE / IFN-β) embryonic kidney reporter cells, Lucia knocked in IFN-β	SEAP / Lucia	293d-null
	HEK-Dual™ Null	Double readout (NF-κB / IL8) embryonic kidney reporter cells, Lucia knocked in IL8	SEAP / Lucia	hkd-nullni
J774	J774-Dual™	NF-κB and IRF macrophage reporter cells	SEAP / Lucia	j774d-nfis
Jurkat	Jurkat-Lucia™ NFAT	NFAT T lymphocyte reporter cells	Lucia	jktl-nfat
	Jurkat-Dual™	NF-κB and IRF T lymphocyte reporter cells	Lucia / SEAP	jktd-isnf
Ramos	Ramos-Blue™	NF-κB / AP-1 B lymphocyte reporter cells, express TLR3, 7, 9 and NOD1	SEAP	rms-sp
THP-1	THP1-Blue™ NF-κB	NF-κB monocyte reporter cells	SEAP	thp-nfkb
	THP1-Lucia™ NF-κB	NF-κB monocyte reporter cells	Lucia	thpl-nfkb
	THP1-Blue™-ISG	IRF monocyte reporter cells	SEAP	thp-isg
	THP1-Lucia™ ISG	IRF monocyte reporter cells	Lucia	thpl-isg
	THP1-Dual™	NF-κB and IRF monocyte reporter cells	SEAP / Lucia	thpd-nfis
MOUSE REPORTER CELLS				
B16	B16-Blue™ ISG	IRF melanoma reporter cells	SEAP	bb-ifnabg
RAW	RAW-Blue™	NF-κB / AP-1 macrophage reporter cells, express all TLRs (except TLR5), NOD1, NOD2, RIG-I, MDA-5, Dectin-1	SEAP	raw-sp
	RAW-Dual™	IRF and MIP-2 (NF-κB) macrophage reporter cells	SEAP / Lucia	rawd-ismip
	RAW-Lucia™ ISG	IRF macrophage reporter cells	Lucia	rawl-isg

CYTOKINE reporter cells

CELL LINE	PRODUCT	DESCRIPTION	REPORTER	CAT. CODE
INTERFERON REPORTER CELLS				
B16	B16-Blue™ IFN-α/β	Mouse type I IFNs reporter cells (JAK/STAT/ISGF3 pathway)	SEAP	bb-ifnt1
HEK293	HEK-Blue™ IFN-α/β	Human type I IFNs reporter cells (JAK/ISGF3/IRF pathway)	SEAP	hkb-ifnab
	HEK-Blue™ IFN-γ	Human type II IFN reporter cells (JAK/STAT1/IRF pathway)	SEAP	hkb-ifng
INTERLEUKIN REPORTER CELLS				
HEK293	HEK-Blue™ IL-1β	Human IL-1β reporter cells (NF-κB / AP-1 pathway), responsive to human and mouse IL-1β	SEAP	hkb-il1b
	HEK-Blue™ IL-1R	Human IL-1α/β reporter cells (NF-κB / AP-1 pathway), responsive to human and mouse IL-1α and IL-1β	SEAP	hkb-il1r
	HEK-Blue™ IL-4/IL-13	Human IL-4/IL-13 reporter cells (STAT-6 pathway), reponsive to human IL-4 and human/mouse IL-13	SEAP	hkb-il413
	HEK-Blue™ IL-6	Human IL-6 reporter cells (STAT-3 pathway)	SEAP	hkb-hil6
	HEK-Blue™ IL-12	Human IL-12 reporter cells (STAT-4 pathway), responsive to human and mouse IL-12	SEAP	hkb-il12
	HEK-Blue™ IL-17	Human IL-17 reporter cells (NF-κB / AP-1 pathway), responsive to human and mouse IL-17	SEAP	hkb-il17
	HEK-Blue™ IL-18	Human IL-18 reporter cells (NF-κB / AP-1 pathway), responsive to human and mouse IL-18	SEAP	hkb-hmil18
	HEK-Blue™ IL-33	Human IL-33 reporter cells (NF-κB / AP-1 pathway)	SEAP	hkb-hil33
TUMOR NECROSIS FACTOR and TUMOR GROWTH FACTOR REPORTER CELLS				
HEK293	HEK-Blue™ CD40L	Human CD40L reporter cells (NF-κB pathway)	SEAP	hkb-cd40
	HEK-Blue™ TNF-α	Human TNF-α reporter cells (NF-κB / AP-1 pathway), responsive to human and mouse TNF-α, MyD88 knocked down	SEAP	hkb-tnfdmyd
	HEK-Blue™ TGF-β	Human TGF-β reporter cells (TGFBRI/Smad3/4 pathway)	SEAP	hkb-tgfb

AUTOPHAGY reporter cells

Autophagy is a multi-step process which involves isolation of cargo within membranes, autophagosome formation, fusion with lysosomes, degradation and recycling of cargo contents. **LC3 (microtubule-associated protein 1 light chain 3)** is a key protein that is processed and recruited from the cytosol to the isolation membrane during the 'autophagic flux'. Its localization can thus serves as a marker for autophagic membranes. Chimeric proteins consisting of **LC3B fused to a green fluorescent protein (GFP) and a red fluorescent protein (RFP)** provide a simple means of monitoring the autophagic process. Autophagosomes marked by an RFP-GFP-LC3 show both RFP and GFP signals. After fusion with lysosomes, GFP signal is significantly reduced due to acidic conditions, while RFP signal remains relatively stable. The autophagic flux can be monitored at different time intervals using a high-resolution fluorescent microscope with the appropriate optical filters.



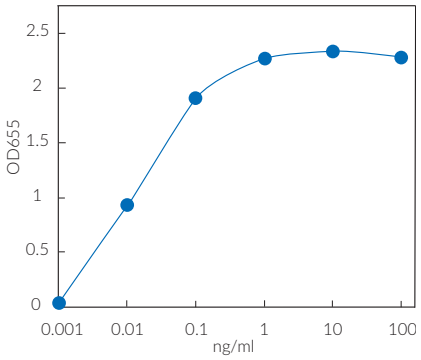
CELL LINE	PRODUCT	DESCRIPTION	REPORTER	CAT. CODE
LC3 REPORTER CELLS				
HeLa	HeLa-Difluo™ hLC3	Human microtubule-associated protein 1 light chain 3 (hLC3::GFP-RFP)reporter cells	GFP - RFP	heldf-hlc3
RAW	RAW-Difluo™ mLC3	Mouse microtubule-associated protein 1 light chain 3 (hLC3::GFP-RFP)reporter cells	GFP - RFP	rawdf-mlc3

Detection reagents

SEAP and alkaline phosphatase detection

SEAP protein is a truncated form of human placental alkaline phosphatase. InvivoGen has developed two types of detection reagents to monitor SEAP activity. **HEK-Blue™ Detection is a cell culture medium** developed to provide a **fast and convenient** method to monitor SEAP expression. Detection of SEAP occurs as the reporter protein is secreted by the cells grown in HEK-Blue™ Detection medium. **QUANTI-Blue™ is a colorimetric enzyme assay** developed to determine any alkaline phosphatase activity in cell culture supernatants. HEK-Blue™ Detection and QUANTI-Blue™ change to a purple-blue color in the presence of SEAP. SEAP activity can be measured by reading the optical density (OD) at 620-655 nm with a microplate reader.

- 10 µl of supernatant samples are sufficient
- No need to process samples
- Assay can be completed in 30 min
- Wide dynamic range allows to detect low and high levels of alkaline phosphatase



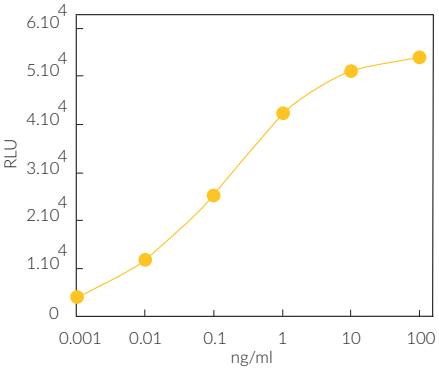
SEAP response of HEK-Dual™ TNF-α to TNF-α. Cells were incubated with increasing concentrations of recombinant human TNF-α. After 24h incubation, the levels of NF-κB-induced SEAP was determined using QUANTI-Blue™. SEAP activity was assessed by measuring the OD at 655 nm.

PRODUCT	DESCRIPTION	QUANTITY	CAT. CODE
HEK-Blue™ Detection	Cell culture medium for SEAP detection	5 pouches / 10 pouches	hb-det2 / hb-det3
QUANTI-Blue™	Alkaline phosphatase detection medium	5 pouches / 10 pouches	rep-qb1 / rep-qb2
Recombinant SEAP protein	Positive control for SEAP reporter assays	10 µg	rec-hseap
SEAP reporter assay kit	Reagent kit to determine level of SEAP	1 kit	rep-sap
pSELECT-zeo-SEAP	SEAP reporter gene in expression plasmid	20 µg	psetz-seap
pNiFty2-SEAP	NF-κB-inducible SEAP reporter gene in expression plasmid	20 µg	pnifty2-seap

Lucia and coelenterazine luciferases detection

InvivoGen's Lucia is a secreted coelenterazine luciferase encoded by a synthetic gene. **QUANTI-Luc™ is a bioluminsecent assay reagent** containing all the components required to quantitively **measure the activity of Lucia and other coelenterazine-utilizing luciferases.** QUANTI-Luc™ contains the coelenterazine substrate and stabilizing agents for the luciferase reaction. The light signal produced is quantified using a **luminometer** and expressed as **relative light units (RLU)**. The signal produced correlates to the amount of luciferase protein expressed, indicating promoter activity in the reporter assay.

- 10-20 µl of supernatant samples are sufficient
- No need to process samples
- 1000-fold brighter than firefly and *Renilla* luciferases
- Low levels of expression detected
- Lucia enhanced signal stability allows for endpoint reading as an alternative to kinetic reading. Shortens time-to-results



Lucia response of HEK-Dual™ TNF-α to TNF-α. Cells were incubated with increasing concentrations of recombinant human TNF-α. After 24h incubation, the levels of NF-κB-induced Lucia was determined using QUANTI-Luc™. Lucia activity was assessed by measuring Relative Light Units (RLU).

PRODUCT	DESCRIPTION	QUANTITY	CAT. CODE
QUANTI-Luc™	Secreted luciferase detection medium	2 pouches / 5 pouches	rep-qlc1 / rep-qlc2
Recombinant Lucia™ protein	Positive control for Lucia reporter assays	10 µg	rec-lucia-1
Streptavidin-Lucia™	Bioluminescent conjugate of streptavidin	2 x 500 µl	rep-svlc
SEAP reporter assay kit	Reagent kit to determine level of SEAP	1 kit	rep-sap
pSELECT Lucia-Tag	Lucia reporter gene in expression plasmid	*See catalog for the complete family of plasmids*	
pNiFty3-Lucia	Inducible Lucia reporter gene in expression plasmid	*See catalog for the complete family of plasmids*	

Selective antibiotics

InvivoGen provides high quality ready-to-use selective antibiotics with purity levels exceeding 95%. Manufactured in its state-of-the-art facility from its own proprietary strains, all InvivoGen selective antibiotics are stable, cell culture-tested, ready to use and affordable. Our rigorous quality control guarantees lot-to-lot reproducibility.

PRODUCT	WORKING CONC.	STABILITY	CONCENTRATION	QUANTITY	CAT. CODE
Blasticidin	Cells: 1-10 µg/ml *E. coli*: 25-100 µg/ml	>1 year at -20°C >1 year at 4°C 2 weeks at 20-25°C	10 mg/ml	50 mg 100 mg 500 mg 1 g (powder)	ant-bl-05 ant-bl-1 ant-bl-5 ant-bl-10p
G418 Sulfate	Cells: 400-1000 µg/ml	>1 year at -20°C 1 year at 4°C 1 month at 20-25°C	100 mg/ml	1 g 5 g	ant-gn-1 ant-gn-5
Hygromycin B Gold™	Cells: 50-200 µg/ml *E. coli*: 50-100 µg/ml	>1 year at -20°C >1 year at 4°C 3 months at 20-25°C	100 mg/ml	1 g 5 g	ant-hg-1 ant-hg-5
Phleomycin	Yeast: 10 µg/ml Filamentous Fungi: 25-150 µg/ml	>1 year at -20°C 1 year at 4°C 1 month at 20-25°C	20 mg/ml	100 mg 500 mg (bottle) 250 mg (powder) 1 g (powder)	ant-ph-1 ant-ph-5 ant-ph-2p ant-ph-10p
Puromycin	Cells: 1-10 µg/ml *E. coli*: 100-125 µg/ml	>1 year at -20°C 1 year at 4°C 3 months at 20-25°C	10 mg/ml	100 mg 500 mg 500 mg (bottle)	ant-pr-1 ant-pr-5 ant-pr-5b
Zeocin™	Cells: 50-300 µg/ml *E. coli*: 25 µg/ml	>1 year at -20°C 1 year at 4°C 1 month at 20-25°C	100 mg/ml	1 g 5 g 5 g (bottle) 1 g (powder) 5 g (powder)	ant-zn-1 ant-zn-5 ant-zn-5b ant-zn-1p ant-zn-5p

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Protect your cells

Be vigilant to keep your cells safe. InvivoGen offers a wide range of highly specific products to help you prevent, detect and eliminate microbial contamination. Choose from our potent, fast-acting and non-toxic to eukaryotic cells anti-microbial (mycoplasmas, bacteria, yeast and fungi) agents.

PREVENTION	
Fungin™	ant-fn-1
Normocin™	ant-nr-1
Plasmocin™ prophylactic	ant-mpp
Primocin™	ant-pm-1

DETECTION	
Plasmotest™	rep-pt1

ELIMINATION	
Fungin™	ant-fn-1
Normocure™	ant-noc
Plasmocin™ treatment	ant-mpt
Plasmocure™	ant-pc

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