

IVIS | Reagents & Biologicals

Optimized for your IVIS System

Caliper Life Sciences offers a wide variety of bioluminescent and fluorescent reagents that are optimized for use with IVIS systems. With over a 1000 publications and millions of mice imaged, our reagents in conjunction with your IVIS system will provide you with the best imaging results. Only Caliper reagents are completely supported by our scientists with vast expertise in *in vivo* imaging.



XenoLight Bioluminescent/Chemiluminescent Substrates

Ultimate sensitivity and reproducibility

Caliper offers bioluminescent substrates in a easy to use format that fit your laboratory workflow for *in vivo* imaging. RediJect substrates offer ultimate sensitivity and reproducibility that is critical for accurate quantitation. Obtain better results by minimizing variability in formulation, minimizing freeze/thaw and controlling batch to batch variation. RediJect D-Luciferin Ultra is a firefly luciferase substrate, pre-formulated with a fluorescent marker, to validate your substrate injection.

Product Name	Description	Quantity	Catalog No.
XenoLight RediJect D-Luciferin	Pre-formulated batch controlled D-Luciferin (K ⁺ salt) ready for <i>in vivo</i> use	50 injections	760504
XenoLight RediJect D-Luciferin Ultra	Pre-formulated batch controlled D-Luciferin (K ⁺ salt) for <i>in vivo</i> use Includes a fluorescent marker to validate substrate injection	50 injections	760505
XenoLight RediJect Coelenterazine h	Pre-formulated batch controlled Coelenterazine h for <i>in vivo</i> use	50 injections	760506
XenoLight RediJect Inflammation Probe, Explorer Kit	Pre-formulated chemiluminescent probe for monitoring inflammation	5 injections	760535
XenoLight RediJect Inflammation Probe, Standard Kit	Pre-formulated chemiluminescent probe for monitoring inflammation	20 injections	760536

Caliper also offers our *in vivo* optimized D-Luciferin in bulk packaging. Volume discounts are available.

Product Name	Description	Quantity	Catalog No.
XenoLight D-Luciferin (K ⁺ Salt)	Bioluminescence substrate for <i>in vivo</i> imaging with firefly luciferase	1 -50 g	122796



Fluorescent Reagents and Cell Lines

Red-Shifted Wavelengths for Deep Tissue Imaging

For improved fluorescence results, Caliper offers Near-Infrared dyes in 3 wavelengths ideal for *in vivo* imaging. Each fluorescent labeling kit allows you to label any peptide or antibody with high specificity and brightness. Caliper also offers NIR detection probes in a ready to use format, now available as Explorer and Standard kits.

XenoLight NIR Fluorescent Reagents

Product Name	Description	Quantity	Catalog No.
XenoLight CF 680 Fluorescent Labeling Kit	Label any peptide, protein, or antibody with an easy to use kit. NIR wavelength for <i>in vivo</i> imaging.	3 labelings	125673
XenoLight CF 750 Fluorescent Labeling Kit	Label any peptide, protein, or antibody with an easy to use kit. NIR wavelength for <i>in vivo</i> imaging.	3 labelings	125674
XenoLight CF 770 Fluorescent Labeling Kit	Label any peptide, protein, or antibody with an easy to use kit. NIR wavelength for <i>in vivo</i> imaging.	3 labelings	125675
XenoLight CF 680 NIR Fluorescent Dye	Reactive 680 fluorescent dye for bulk protein or antibody labeling	1 μ mole	125676
XenoLight CF 750 NIR Fluorescent Dye	Reactive 750 fluorescent dye for bulk protein or antibody labeling	1 μ mole	125677
XenoLight CF 770 NIR Fluorescent Dye	Reactive 770 fluorescent dye for bulk protein or antibody labeling	1 μ mole	125678
XenoLight CF 680 Free Acid	Non-reactive control dye for Xenolight CF 680	1 μ mole	760596
XenoLight CF 750 Free Acid	Non-reactive control dye for Xenolight CF 750	1 μ mole	760597
XenoLight CF 770 Free Acid	Non-reactive control dye for Xenolight CF 770	1 μ mole	760598
XenoLight DiR	NIR dye for non-invasive imaging of cell homing (stem cells, T cells) <i>in vivo</i>	25 mg	125964
XenoLight RediJect Bone Probe CF 680 Explorer Kit	Detection kit for targeting hydroxyapatite, a biomarker for osteoblast activity	5 injections	760531
XenoLight RediJect Bone Probe CF 680 Standard Kit	Detection kit for targeting hydroxyapatite, a biomarker for osteoblast activity	20 injections	760532
XenoLight RediJect COX-2 Probe Explorer Kit	Imaging probe that specifically detects the cyclooxygenase-2 (COX-2)	5 injections	133316
XenoLight RediJect COX-2 Probe Standard Kit	Imaging probe that specifically detects the cyclooxygenase-2 (COX-2)	20 injections	133314
XenoLight RediJect COX-2 Probe Control Dye	Non-reactive control dye for COX-2 probe	5 injections	133349
XenoLight RediJect Bacterial Detection Probe 750	NIR-targeted probe for non-invasive detection of bacterial infections <i>in vivo</i>	5 injections	133397
XenoLight RediJect Bacterial Detection Probe 750	NIR-targeted probe for non-invasive detection of bacterial infections <i>in vivo</i>	20 injections	133398
XenoLight RediJect Bacterial Detection Probe Control Dye	Non-reactive control dye for RediJect Bacterial Detection Probe	5 injections	133399
XenoLight RediJect 2-DG 750 Probe Explorer kit	NIR targeted probe for non-invasive imaging of glucose uptake <i>in vivo</i>	5 injections	760561
XenoLight RediJect 2-DG 750 Probe Standard Kit	NIR targeted probe for non-invasive imaging of glucose uptake <i>in vivo</i>	20 injections	760562
XenoLight RediJect Integrin 750 Probe Explorer Kit	NIR targeted probe for non-invasive imaging of integrins <i>in vivo</i>	5 injections	760563
XenoLight RediJect Integrin 750 Probe Standard Kit	NIR targeted probe for non-invasive imaging of integrins <i>in vivo</i>	20 injections	760564
XenoLight RediJect 2-DG 750 Control Dye	Non-reactive control dye for RediJect 2-DG 750 probe	5 injections	760567
XenoLight RediJect Integrin 750 Control Dye	Non-reactive 750 control dye for RediJect Integrin 750 probe	5 injections	760577

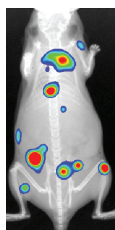
Oncology cell lines, dual labeled with Luciferase and Red Fluorescent Protein tdTomato or Green Fluorescent Protein (GFP), let you get a better perspective on tumor growth and metastasis. You can follow tumor development with Luciferase while the fluorescent protein allows for better *ex vivo* analysis.

Bioware Ultra **Red**

Product Name	Description	Catalog No.
4T1-tdTomato	Murine breast cancer cell line labeled with RFP tdTomato	125668
4T1-luc2-tdTomato	Murine breast cancer cell line dual labeled with luciferase and tdTomato	125669
MDA-MB-231-tdTomato	Human breast cancer cell line labeled with RFP tdTomato	125737
MDA-MB-231-luc2-tdTomato	Human breast cancer cell line dual labeled with luciferase and tdTomato	125738

Bioware Ultra *Green*

Product Name	Description	Catalog No.
4T1-luc2-GFP	Murine breast cancer cell line dual-labeled with luciferase and GFP	128090
KU-7-luc2-GFP	Human bladder cancer cell line dual-labeled with luciferase and GFP	128091
MDA-MB-231-luc2-GFP	Human breast cancer cell line dual-labeled with luciferase and GFP	128442
NCI-N87-luc2-GFP	Human gastric cancer cell line dual-labeled with luciferase and GFP	128443
PC-3-luc2-GFP	Human prostate cancer cell line dual-labeled with luciferase and GFP	133416



Bioluminescent Cell Lines for Various Oncology Models

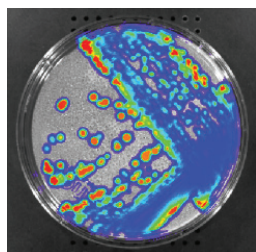
With most oncology models brighter cell lines lead to better results. Caliper is the only company that offers bioluminescent cell lines covering a range of cancer models, including breast, colorectal, lung and prostate as well as lymphoma. Bioware Ultra cell lines, created using the luc2 vector, produce intensified light allowing for more sensitive non-invasive detection of cells *in vivo*. Some of the cell lines are bright enough to detect a single cell *in vivo*. With these bright cell lines your IVIS system can start collecting tumor progression data right after the cells are implanted.

Bioware Ultra Oncology Cell Lines Labeled with Enhanced Luc2 (pGL4) Vector

Product Name	Description	Catalog No.
HT1080-luc2	Human fibrosarcoma cancer cell line	128092
4T1-luc2	Murine breast cancer cell line, single cell detection <i>in vivo</i>	124087
MDA-MB-231-luc2	Human breast cancer cell line, ideal for experimental metastasis model	124319
PC-3M-luc2	Human prostate cancer cell line, orthotopic, intracardiac tumor models	124089
PC-3-luc2	Human prostate cancer cell line	128444
LnCaP-luc2	Human prostate cancer cell line, 15 fold brighter than luc version	125055
B16-F10-luc2	Murine melanoma cancer cell line, 40 fold brighter than luc version	124734
HCT-116-luc2	Human colorectal cancer cell line, subcutaneous tumor models	124318
HT-29-luc2	Human colorectal cancer cell line, ideal for s.c. models with metastasis	124353
Colo205-luc2	Human colorectal cancer cell line	124317
U-87 MG-luc2	Human brain cancer cell line, ideal for glioblastoma models	124577
NCI-H460-luc2	Human lung cancer cell line, ideal for orthotopic lung tumor models	124316
EL4-luc2	Murine lymphoma cancer cell line	124088
K-562-luc2	Human leukemia cell line, orthotopic (intracerebral) tumor model	124735
MOLT-4-luc2	Human leukemia cell line	125057
ACHN-luc2	Human renal cancer cell line	125056
BxPC3-luc2	Human pancreatic cancer cell	125058

Bioware Oncology Cell Lines Labeled with Luc (pGL3) Vector

Product Name	Description	Catalog No.	Product Name	Description	Catalog No.
MDA-MB-231-luc-D3-H1	Human breast cancer	119261	LL/2-luc-M38	Murine lung cancer	119267
MDA-MB-231-luc-D3-H2LN	Human breast cancer	119369	B16-F10-luc-G5	Murine melanoma	119269
MCF-7-luc-F5	Human breast cancer	119262	PC-3M-luc-C6	Human prostate cancer	119270
HeLa-luc	Human cervical cancer	119272	LNCaP-luc-M6	Human prostate cancer	119271
HT-29-luc-D6	Human colorectal cancer	119264	SKOV3-luc-D3	Human ovarian cancer	119276
LoVo-6-luc-1	Human colorectal cancer	119265	hVEGF-luc/PC3M	Oncology/angiogenesis reporter cell line	119273
A549-luc-C8	Human lung cancer	119266	p53-RE-luc/A549	Cancer/apoptosis/toxicology reporter cell line	119274



Bioware Light Producing Microorganisms

IVIS technology has been successfully used to non-invasively measure the spread of infection, monitor infection dynamics and determine the *in vivo* efficacy of antimicrobial compounds in various ID models. Caliper offers various Gram positive and Gram negative bacteria labeled with bacterial luciferase. One advantage with the bacterial luciferase is that it negates the use of exogenous substrate like Luciferin. Caliper also offers tools like plasmid vectors that allow you to successfully label any Gram positive or Gram negative bacteria of your choice.

Bacterium	Parental Strain	Catalog No.	Bacterium	Parental Strain	Catalog No.
<i>Y. pseudotuberculosis</i>	YP111pYV (type III secretion system), clinical isolate	119234	<i>Y. enterocolitica</i>	WS2589	119233
<i>P. aeruginosa</i>	ATCC 19660	119228	<i>S. typhimurium</i>	SL1344	119230
<i>S. pneumoniae</i>	D39 serotype 2	119245	<i>S. dysenteriae</i>	88A6205 clinical isolate	119231
<i>S. aureus</i>	8325-4	119239	<i>S. aureus</i>	ATCC 12600	119240
<i>S. pneumoniae</i>	HUS-TMBIG serotype 19A	119246	<i>S. aureus</i>	16-MRSA	119241
<i>S. pneumoniae</i>	A66.1, serotype 3	119247	<i>S. aureus</i>	ATCC 33591	119242
<i>S. pneumoniae</i>	EF3030 serotype 19F	119248	<i>L. monocytogenes</i>	10403S (serotype 1/2a wild-type strain)	119238
<i>S. pneumoniae</i>	140301, serotype 14	119249	<i>S. typhimurium</i>	FDA1189	119235
<i>E. coli</i>	EPEC WS2572	119223	<i>S. pneumoniae</i>	230401 serotype 23	119321
<i>E. coli</i>	EPEC WS2583	119225	<i>S. pneumoniae</i>	TIGR strain serotype 4	119322
<i>L. monocytogenes</i>	ATCC 23074	119237	<i>S. aureus</i>	ATCC 49525	119243
<i>S. pyogenes</i>	Strain 591, group A, Serotype M49	119250	<i>K. pneumoniae</i>	93A 5370	119227
<i>H. influenzae</i>	ATCC 51907	119224	<i>S. aureus</i>	UAMS-1	119244
<i>Y. enterocolitica</i>	91A1854 clinical isolate	119232	<i>P. aeruginosa</i>	PAO1	119229
			<i>P. mirabilis</i>	ATCC 51286	119236

Bioware Plasmid Vectors

Product Name	Description	Catalog No.
P-Xen5	Gram-positive lux transposon plasmid	119253
P-Xen13	Gram negative luxCDABE vector	119255

Contact Information:


Please visit our website at www.caliperLS.com to gain more information about all our reagents. You can download data sheets and directly place an order for any of the above products.

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