Research use only. Not for use in diagnostic procedures.

IVISbrite™ Bioluminescent Tumor Cell Line

## IVISbrite™ Colo205 Red F-luc Bioluminescent Tumor Cell Line

Product Number: BW124317

#### Material Provided

Cells: 2 x 1 mL frozen aliquots (BW124317V)

Format: 1.0 x 10° cells / mL in 95% FBS, 5% DMSO

Colo205 Red F-luc
Human: colorectal adenocarcinoma
ATCC (CCL-222)
Red F-luc-Puro 3d generation lentivirus
At least 6,000 photons/cell/sec. Exact number will vary
depending on imaging and culturing conditions.
RPMI 1640 ATCC Cat. No. 30-2001.
Supplement the above with 10% Hyclone Fetal Bovine
Serum (FBS) GE HealthCare Cat. No. SH30071.
Mixed, adherent and suspension*; viability cannot be
determined solely by cell attachment. Refer to the cell
culture guidelines for more detailed instructions.
Remove frozen cells from dry ice packaging and
immediately place cells at a temperature below -130°C,
preferably in liquid nitrogen vapor, until ready to use.
28 hours
When initially thawing, use T25 flask or 10cm plate.
Cells should be ready to expand within 2-5 days.
Antibiotics can be used in the media if desired after the
initial thaw. (puromycin at 2ug/mL). Refer to Cell
Culture Guidelines for more detailed instructions.

<sup>\*</sup> Please refer to Morphology on page 2 of this document



#### The Features

Revvity IVISbrite™ cell line models offer researchers the ability to:

- Monitor early tumor development
- Monitor tumor growth and metastases in vivo
- Quantify tumor burden in the whole animal
- Follow responses to therapeutic treatments non-invasively in longitudinal studies using the same cohorts of mice

#### Murine Pathogen Free

All Revvity cell lines are confirmed to be pathogen free by the IMPACT Profile I (PCR) at the University of Missouri Research Animal Diagnostic and Investigative Laboratory.

#### Cell Line Stability

Cell may undergo genotypic changes resulting in reduced responsiveness over time in normal cell culture conditions. Genetic instability is a biological phenomenon that occurs in all stably transfected cells. Therefore, it is recommended to prepare an adequate number of frozen stock at early passages.

### **Product Warranty**

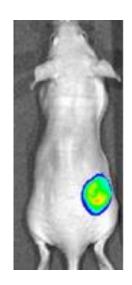
Revvity warrants that cells will be viable upon shipment from Revvity for a period of thirty days, provided they have been properly stored and handled during this period.

Human Lung Cancer Cell Line: Colo205-Red F-luc

Colo205-Red F-luc is a luciferase expressing cell line which was stably transfected with firefly luciferase gene from *Luciola Italica* (Red F-luc). The cell line was established by transducing lentivirus containing Red F-luc luciferase under the control of human ubiquitin C promoter. These cells will serve as a new tool to detect drug efficacy in vitro and in vivo with high sensitivity.

#### Morphology

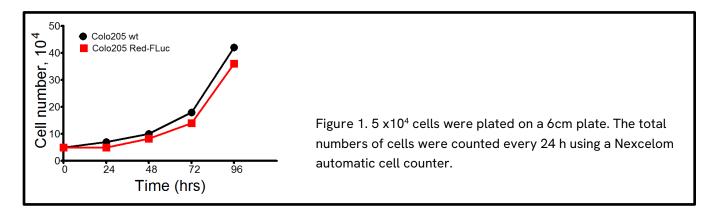
Colo205-Red F-luc is a mixture of adherent and suspension cells that will normally appear in culture as rounded and loosely attached or fully suspended cells. Expect to see irregularly shaped clusters of cells in suspension for the first several days. Cells that do attach may resemble epithelial morphology, but can detach easily and form large, suspended aggregates of healthy, growing cells. Refer to Cell Culture Guidelines for more detailed instructions.



Bioluminescence image of Colo205 Red F-luc subcutaneous tumor

# revvity

## Growth Curve of Colo205 Red F-luc Cells



## In Vitro BLI Signal Stability

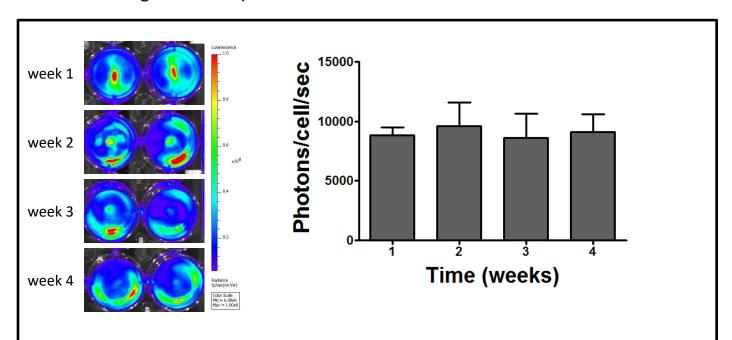


Figure 2. 5 x10<sup>4</sup> cells were plated per well in 24-well plates. Cells were incubated at 37 °C for recovery overnight and luciferase assay was performed using the Revvity IVIS° SpectrumCT. Each experiment was done in quadruplicates. The cells were maintained in continuous culture over four weeks and weekly luciferase assay was performed. Bioluminescence data was analyzed using the Living Image 4.0 software.



## Subcutaneous Tumor Growth in a Nu/nu Mouse

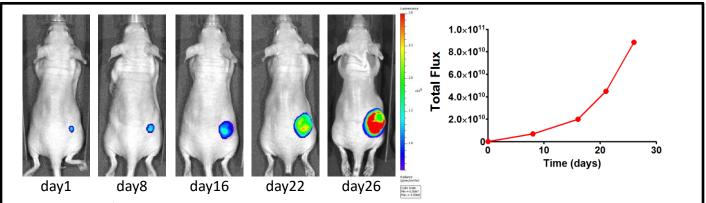


Figure 3. 1 x  $10^6$  Colo205-Red F-luc cells were injected subcutaneously into the dorsal region near the thigh of female nu/nu mouse. Tumor growth was monitored for luciferase expression using the Revvity IVIS® Spectrum at various time points. Mice were imaged 10 minutes post i.p. injection of luciferin at 150 mg/kg at various time points. The image above shows tumor growth from a representative mouse.

## Tumor Growth Comparison Between Wild Type and Red F-luc Cells

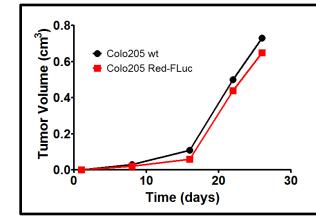


Figure 4. 1 x  $10^6$  Colo205 Red F-luc and Colo205 parental cells were injected subcutaneously into the dorsal region near the thigh of female nu/nu mouse. Tumor growth was monitored by caliper measurements at various time points. Similar tumor growth rate was observed for both parental and Red F-luc transduced cell lines.

This product is not for resale or distribution, except by authorized distributors. This product is sold for in vivo animal research use only and is not intended for any diagnostic use or procedures. The information provided in this document is valid for the specified lot number and date of analysis. This information is for reference purposes only and does not constitute a warranty or guarantee of the product's suitability for any specific use. Revvity, Inc., its subsidiaries, and/or affiliates (collectively, "Revvity") do not assume any liability for any errors or damages arising from the use of this document or the product described herein. REVVITY EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDLESS OF WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, ALLEGEDLY ARISING FROM ANY USAGE OF ANY TRADE OR ANY COURSE OF DEALING, IN CONNECTION WITH THE USE OF INFORMATION CONTAINED HEREIN OR THE PRODUCT ITSELF. Additionally, unless otherwise agreed to in writing by Revvity pursuant to a separate written agreement, no commercial use of this product is allowed. "Commercial use" means any and all uses of this product and/or its derivatives by a party for money or other consideration and may include without limitation: (1) product manufacture; (2) providing services, information or data to another party for remuneration; and/or (3) resale of the product or its derivatives, whether or not such product or derivatives are resold for use in research. Commercial use does not include the original purchaser providing the product to its contractor solely for use on the original purchaser's research; provided that all product materials are returned to the original purchaser and/or destroyed by the contractor upon completion of such project.

