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Technical Data Sheet: A549-LUC2

ATCC® Number	CCL-185-LUC2™
Organism	*Homo sapiens*
Tissue/Disease Source	Malignant Melanoma
Product Description	A549-Luc2
Application	Excellent signal/background ratio and stable Luciferase expression make this cell line ideal for in vivo bioluminescence imaging of xenograft animal model to study human cancer and monitor activity of anti-cancer drug. It also can be used in cell-based assays for cancer research.

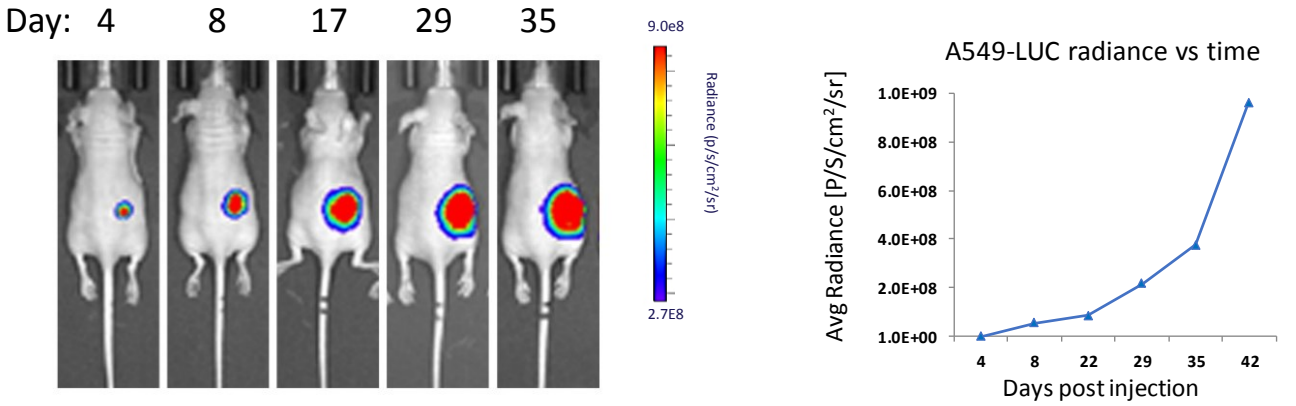

Figure 1: *In vivo* detection of luciferase activity of A549-Luc2. A549-Luc2 cells (3 x 10^6) were injected subcutaneously into the dorsal region near the thigh of female nude mice. Tumor growth was monitored weekly using a Xenogen IVIS Spectrum. *In vivo* bioluminescence imaging demonstrated the progression of tumors.

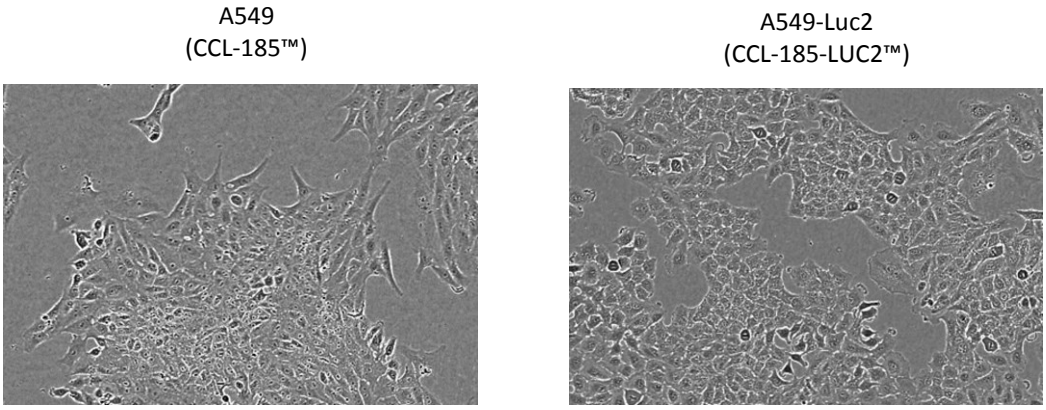

Figure 2: Cell Morphology of A549 parental and A549-Luc2. Cells were maintained in ATCC recommended culture conditions. Cell morphology was observed under Nikon™ microscopy and images were captured by Zeiss® digital camera**.**

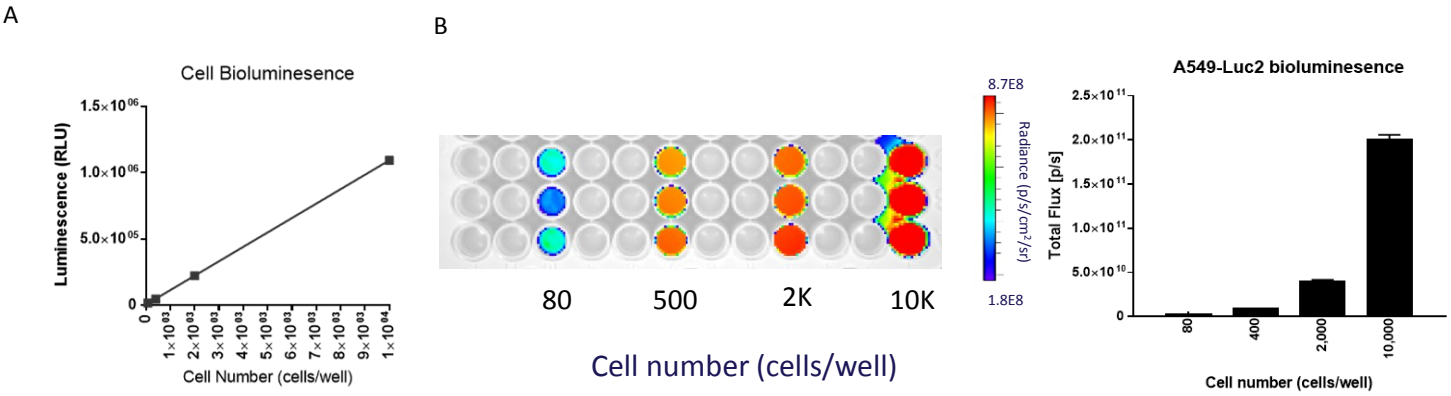

Figure 3: Linearity of luminescence and *in vitro* quantification of luciferase activity of A549-Luc2. Cells were seeded in a 96-well plate at indicated cell numbers per well, and Bright-Glo (Promega) was added to the indicated wells. The luminescence of the plate was read within 10 minutes using a luminescence plate reader (A) and determined to have a linear correlation of bioluminescence intensity with cell numbers. (B) The plate was imaged using a Xenogen IVIS Spectrum to quantify that photons emitted per cell.