

## KODAK In-Vivo Imaging System FX Pro

Precision automation, high sensitivity optical molecular imaging and high resolution digital X-ray capabilities in a powerful multi-modal system

The KODAK In-Vivo Imaging System FX Pro: Whether performing time-lapse bio-distribution, multi-wavelength fluorescence, luminescence, multi-modal optical, X-ray, radioisotopic imaging or a combination of any of these imaging modalities, the NEW In-Vivo FX Pro fully automates the process for an entirely new level of sensitivity, throughput, repeatability and ease-of-use.

### Unmatched Imaging Versatility

- Greatly enhances anatomical localization of molecular imaging agent signals in small animals, organs, and tissues, and improves understanding of imaging agent's bio-distribution through combined use of time-lapse molecular imaging and X-ray imaging
- Automated switching between multiple imaging modalities that include multi-wavelength fluorescent, luminescent, radioisotopic, and X-ray — without disturbing the sample
- Versatile system design also accommodates *in vitro* assay formats including blots, plates and gels

### Precision Automation

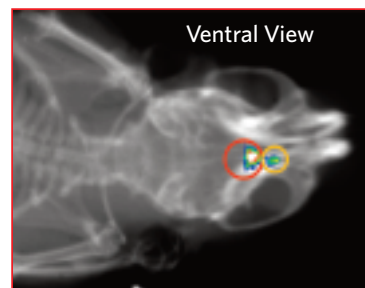
- Computer controlled configuration minimizes setup time, maximizing efficiency and throughput
- The highly accurate automated lens system records the precise  $f$ -stop, zoom and focal plane parameters enabling reproducibility and traceability
- Smart digital positioning technology with 15-position excitation, 4-position emission filter systems enable precise positioning of repeatable settings
- Automated aluminum filters enable control of X-ray wavelengths for optimal X-ray imaging of tissue or bone

### Superior Image Quality

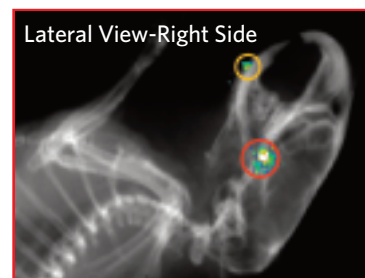
- 4-million pixel resolution and 10x optical zoom deliver up to 10 micron/pixel resolution
- True 16-bit imaging produces over 65,000 levels of grayscale resolution
- Full illumination and lens correction algorithms minimize optical artifacts in images and data

### Fast, Convenient Workflow

- Focused xenon light source ensures high quality images and time-saving throughput
- Live Preview and Autofocus functions facilitate easy subject positioning and focusing
- Time Lapse and Progressive exposure modes automatically execute multiple imaging protocols
- Create time-saving one Click Access templates for commonly used exposure routines



Ventral position imaging shows two optical signals generating metastatic lesions located in the cranial region of the mouse



Subsequent lateral position imaging clearly separates the two lesions to specific jaw and skull locations

Images Courtesy Dr. Bohumil. Bednar, Merck Co., Inc

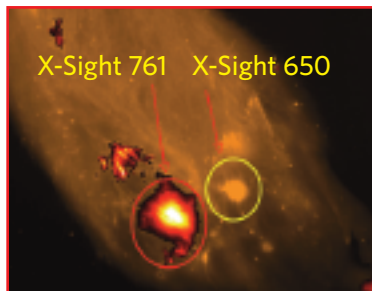
**Kodak**

Molecular Imaging Systems



**KODAK In-Vivo Imaging System FX Pro**

**Fluorescent Imaging:**  
**KODAK X-SIGHT 761 and 650**  
**Imaging Agents injected**  
**in Rat Abdomen**



Overlay of ex720/em790 Channel  
on ex 625/em 700 Channel: Images 1 min



Dual overlay of both channels on X-ray

**Find out more**

1-877-747-4357, express code 7  
Outside the U.S.: +1-203-786-5657  
[www.kodak.com/go/invivo](http://www.kodak.com/go/invivo)

| Specifications - <b>KODAK Imaging System FX Pro</b> |  |
|---|--|
| <b>Camera</b>                                       |  |
| CCD   | 2048 x 2048 pixel CCD  |
| Cooling   | -29°C absolute   |
| Lens  | Computer Controlled 10x optical zoom, 20-200 mm, f2.8  |
| <b>Illumination</b>                                 |  |
| Fluorescence  | Automated 15-position selectable wavelength<br>380 - 780 nm range<br>175 watt xenon illumination source  |
| <b>White Light</b>                                  | White-light epi-illumination and transillumination   |
| <b>Emission Filters</b>                             | Automated selectable wide angle, 440 - 830 nm  |
| <b>Performance</b>                                  |  |
| Field of View                                       | 2 x 2 cm to 20 x 20 cm   |
| Optical Resolution                                  | 10 microns/pixel   |
| Data Acquisition                                    | 16-bit single capture; n-bit data acquisition  |
| Binning   | 1x2, 2x2, 1x4, 2x4, 4x4, 1x8, 2x8, 4x8, 8x8, 16x16   |
| Dark Current  | 0.003 e-pixels/sec   |
| Read Noise  | 9 electrons (Nominal)  |
| Dynamic Range                                       | >4 OD  |
| Quantum Efficiency                                  | >55% @ 470 nm  |
| <b>Detection Modes</b>                              | Multiwavelength Fluorescence, Luminescence<br>Absorbance, Radioisotopic, X-ray   |
| <b>Exposure Modes</b>                               | Single Capture, Multiple Capture, Progressive Time-Lapse   |
| <b>Computer &amp; Software</b>                      |  |
| Interface   | KODAK MI Software for complete quantitative analysis<br>IEEE1394 (FIREWIRE)  |
| Operating Systems                                   | WINDOWS 2000/XP, MACINTOSH OS  |
| <b>Digital X-ray</b>                                |  |
| Energy Range  | 12-35 kVP  |
| FDA Compliance                                      | Meets and exceeds compliance to FDA Dept. of Health and<br>Human Services regulation CFR 1020.40 radiation safety  |
| Maximum Current                                     | 150uA  |
| Spot Size   | < 50 microns   |
| Target Material                                     | Tungsten   |
| Window Filtration                                   | Beryllium  |
| Cone of Illumination                                | >33 degrees  |
| Field of Illumination                               | 20 X 20 cm   |
| <b>Animal Management Center</b>                     | Proprietary animal management center includes integrated<br>sample chamber with radiographic and radioisotopic screens;<br>allows for remote switching between optical X-ray or<br>radioisotopic imaging without disturbing the subject. |
| <b>Instrument</b>                                   |  |
| Approximate Dimensions                              | 69 x 24 x 52,(in) 175 x 66 x 122, (cm), (l x w x h)  |
| Approximate Net Weight                              | 226 lbs  |
| <b>Power Requirements</b>                           | 120VAC, 7A <b>or</b><br>230VAC, 3.5A   |

**Ordering Information**

| CAT. No. | Description  |
|----------|--|
| 804 6666 | In-Vivo FX Pro with 3 single-user software licenses          |
| 162 7884 | In-Vivo FX Pro with 3-user network software licenses         |
| 163 8618 | In-Vivo FX Pro with PC and 3 single-user software licenses   |
| 895 9769 | In-Vivo FX Pro with PC and 3-user network software licenses  |
| 114 0607 | In-Vivo FX Pro with Mac and 3 single-user software licenses  |
| 151 4967 | In-Vivo FX Pro with Mac and 3-user network software licenses |