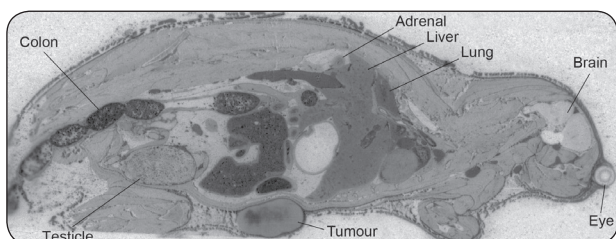


Autoradiography

Quantitative whole-body autoradiography (WBA) is recognized as a comprehensive assessment of the distribution of radio labeled drug, thereby answering specific pharmacokinetic issues regarding e.g. tissue distribution, tissue, such as tumor, uptake and routes of elimination.

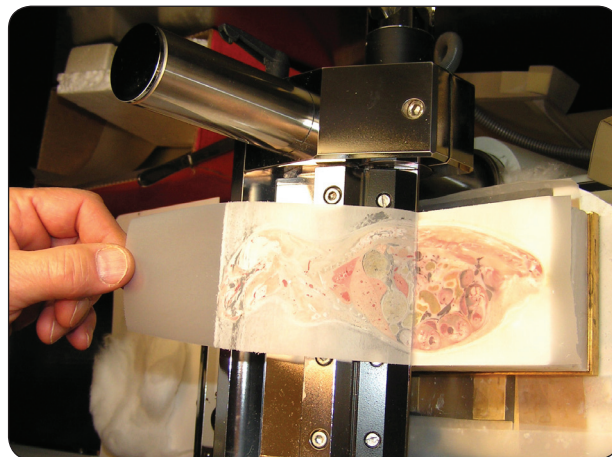
The visual representation, the autoradiogram, reveals the presence and localization of the radio label in specific tissues. The use of digital image processing and radio labeled standards supports the qualitative and quantitative analysis of individual whole-body sections. Phosphor imaging has added significant increase in sensitivity as well as turnover time to the technology.



Whole body autoradiogram of tumor bearing rat.

Capabilities & Equipments

The experienced WBA group at Active Biotech performs autoradiography studies using ^3H and ^{14}C drugs administered to various species such as mice, rats, rabbits and nonhuman primates. We also have equipment for punching small segments of certain tissues from cryo sections for further analyses, such as metabolite identification. Our laboratory is equipped with two large microtomes (Leica CM cryomicrotome and PMW450 MP Cryomicrotome) capable of sectioning both small (mice and rats) and larger animals (rabbits and nonhuman primates). With Fuji phosphor imagers, high resolution images at 50 and 100 micron pixel size are produced and the images are analyzed with Ray-test imaging software. With the Macro Tape Transfer System, whole body or large cryo sections from tape can also be transferred to glass slides for accurate microscopic examinations.



Sectioning in the Leica CM cryomicrotome.

WBA expertise

Active Biotech can provide a wide variety of high quality WBA services to support discovery and development studies. We have many years experience using different applications of this technique.



Fuji phosphor imager and PC workstation.