

Division of Biological Science and Technology	Research field	Functional Tumor Cell Biology	Lab. ID BS13
Laboratory web site			
Research subjects			
<p>Accumulation of mutation in oncogenes and tumor suppressor genes in normal cells results in malignant tumors. Malignant tumors invade into tissues and finally metastasize to distant organs. Tumor invasion into tissue requires degradation of tissue basement membrane. We discovered a protease which is the key enzyme for tumor metastasis, and named it as MT1-MMP (Nature, 1994). Accumulating evidences indicate that MT1-MMP plays important roles in not only tumor invasion but also regulation of signal transductions which induce tumor growth and migration.</p>			
Master/Doctor course: Education policy, curriculum, typical activity in the laboratory			
<p>Learn methods for cell culture, isolation and purification of DNA and RNA, immunofluorescent staining, estimating matrix metalloproteinase activity, measuring cell migration and invasion.</p>			
Daily life in the laboratory, etc.			
<p>Enjoy science.</p>			
Message or comments by the laboratory faculty staffs			
<p>The goal of our project is to elucidate the molecular mechanism of tumor metastasis and develop diagnostic and therapeutic application.</p>			
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