

Public Abstract

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Title:BACTERIOPHAGE DISPLAY SELECTIONS OF OVARIAN CANCER AVID PEPTIDES

Ovarian cancer is the fifth leading cause of cancer deaths in women and is the most fatal of gynecological cancers. The high fatality of the disease is a direct result of inadequate diagnostic methods, and it is therefore necessary to develop new techniques to detect ovarian cancer. This dissertation describes the discovery and development of one new peptide (J18) and two phage particles (pM6 and pM9) that bind to ovarian cancer cells and that were successfully used to image and locate human ovarian tumors in mice. As a result, these novel detection methods may be utilized to detect and diagnose ovarian cancer in patients, and may lead to an overall improvement in survival rates.