

**#230** The zyme/protease M/neurosin gene maps close to the human kallikrein gene family and is hormonally regulated. Yousef, G.M., Luo, L.Y., Diamandis, E.P., Sotiropoulou, G., Herbrick, J-A., Scherer, S.W., Grass, L. *Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, Department of Laboratory Medicine and Pathobiology, University of Toronto, ON; Department of Pharmacy, University of Patras, Patras, Greece and Department of Medical Genetics and Microbiology, University of Toronto, ON.*

The zyme/protease M/neurosin gene was recently identified as a novel serine protease which is highly expressed in the brain and other tissues. It appears that the zyme gene is down-regulated in breast cancer and, more so, in metastatic breast cancer and breast cancer cell lines. This gene was previously localized on chromosome 19q13.3-13.4 by fluorescence in-situ hybridization. By using somatic cell hybrid analysis, we verified that this gene is localized on chromosome 19. We have further mapped this gene with radiation hybrid testing and found that zyme is localized on chromosome 19q13.3-13.4, between markers NIB1805 and WI-9028. This region of chromosome 19 also contains the human kallikrein gene family. A physical map of the region indicates that the five serine proteases mapping in the region are clustered as follows: Centrosome-zyne-NES1-KLK1-PSA-KLK2. It has previously been reported that NES1 as well as PSA expression