

1908 Mapping the normal epithelial cell-specific 1 gene to chromosome 19q13. Luo, L.Y., Herbrick, J., Scherer, S., Diamandis E.P. Department of Pathology and Laboratory Medicine, Mount Sinai Hospital, 600 University Avenue (L.Y.L., E.P.D.) and Department of Genetics, Hospital for Sick Children, 555 University Avenue (J.H., S.S.), Toronto, Ontario, M5G, 1X5, Canada.

Normal epithelial cell-specific 1 (*NES1*) gene is a recently identified novel serine protease-like gene, the expression of which is downregulated during breast cancer progression. Although its cDNA has been sequenced, its genomic structure and chromosomal localization is still not known. In order to determine its chromosomal localization by somatic cell hybrid mapping, several pairs of primers were designed based on the cDNA sequence and used to amplify the *NES1* gene by polymerase chain reaction (PCR). When the PCR products were cloned and sequenced, it was revealed that two pairs of independent primers were able to amplify the *NES1* gene correctly. One pair gave PCR product of different length when the cDNA of *NES1* or genomic DNA was used as a target. Thus we identified and sequenced one intron of this gene (data not shown). Using these two primer pairs and a panel of 24 human rodent somatic cell hybrids, we have mapped *NES1* gene to chromosome 19. To further sublocalize this gene, radiation hybrid mapping was employed. The same primers were used to screen the Genebridge 4 whole-genome radiation hybrid panel. The mapping indicated that the *NES1* gene was on chromosome 19q13, between markers NIB1805 and W15264. Several other members of the serine protease family, including pancreatic/renal