Curriculum Vitae

Yoshinori Murakami, M.D., Ph.D.

1983 M.D., University of Tokyo, School of Medicine

1992 Ph.D., University of Tokyo, School of Medicine

1992-1994 Research Associate, Howard Hughes Medical Institute, University of Utah

1994-2000 Section Head, Oncogene Division, National Cancer Center Research Institute

2000- Project Leader, Tumor Suppression & the Functional Genomics Project, National Cancer Center Research Institute

Involvement of a cell adhesion molecule, TSLC1, in human oncogenesis

Yoshinori Murakami

(Tumor Suppression & the Functional Genomics Project, National Cancer Center Research Institute)

TSLC1 is a tumor suppressor in lung cancer that we have previously identified by functional complementation. Two-hit inactivation of the *TSLC1* by promoter methylation with or without loss of heterozygosity on 11q23 is observed in 30-50% of various human cancers. Inactivation of TSLC1 is preferentially observed in advanced tumors, suggesting that TSLC1 is involved in invasion or metastasis of human cancer. TSLC1 encodes an immunoglubulin-like cell adhesion molecule. We have reported that TSLC1 associates with DAL-1/protein 4.1B, a member of the spectrin-actin binding proteins, through its cytoplasmic domain and further interacts with actin filament. TSLC1 also associates with a member of membrane-associated guanylate kinase homologs, MPP3, through its cytoplamic end. These results suggest that TSLC1 would be involved in cell adhesion, cytoskeletal organization and cell polarity, while disruption of this cascade may lead tumor progression. Possible role of TSLC1 cascade in human oncogenesis will be presented.