ABSTRACT

The FGFR-encoding gene was studied extensively with regard to its expression, hyperamplification, mutation, translocation, or such in various cancer cells. As a result, novel fusion polypeptides in which the FGFR3 polypeptide is fused with a different polypeptide were identified and isolated from several types of bladder cancer-derived cells and lung cancer cells. The use of a fusion polypeptide of the present invention as a biomarker in FGFR inhibitor-based cancer therapy enables one to avoid side effects in cancer therapy and control the therapeutic condition to produce the best therapeutic effect, thereby enabling individualized medicine.