Fibroblast Growth Factor Receptors (FGFRs), are transmembrane tyrosine kinase receptors that induce intracellular tyrosine kinase activity when bound to Fibroblast Growth Factor. FGFR plays crucial roles in development and cell growth. Uregulation of the FGF/FGFR signaling pathway leads to induction of mitogenic and survival signals, as well as promoting epithelial-mesenchymal transition, invasion and tumor angiogenesis. Amplification or activation of FGFR1 and FGFR2 genes has been linked to several cancer types such as lung cancer, breast cancer and gastric cancer.

The FGFR genetic alteration cell panel (ATCC TCP-1034) is composed of eight selected human tumor cell lines from common cancer types that carry various gene copy number amplification within the FGFR1 or FGFR2 genes. The FGFR1 or FGFR2 status of each cell line has been validated by ATCC. This panel is useful for FGFR pathway research and FGFR inhibitors anti-cancer drug discovery.