Cost-Efficient and Easy to Perform PCR-Based Assay to Identify Met Exon 14 Skipping in Formalin-Fixed Paraffin-Embedded (FFPE) Non-Small Cell Lung Cancer (NSCLC) Samples


MET is a receptor tyrosine kinase (RTK) that plays important roles in carcinogenesis. Despite being frequently overexpressed in cancer, clinical responses to targeting this receptor have been limited. Recently novel splicing mutations involving the loss of exon 14 (called METex14 skipping) have emerged as potential biomarkers to predict for responsiveness to targeted therapies with Met inhibitors in non-small cell lung cancer (NSCLC). Currently, the diverse genomic alterations responsible for METex14 skipping pose a challenge for routine clinical diagnostic testing. In this report, we examine three different methodologies to detect METex14 and assess their potential utility for use as a diagnostic assay for both the identification of METex14 and intra-tumoural distribution in NSCLC.