

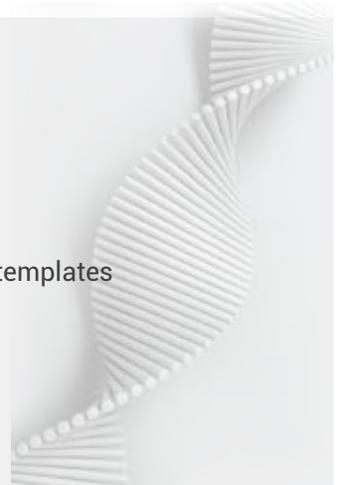


QFusion™ ALK Fusion Detection Kit

EML4-ALK and KIF5B-ALK

Highlights

- Comprehensive**
 Cover 95% EML4-ALK and 90% KIF5B-ALK variants in COSMIC database
- Easy to Operate**
 One-tube multiplex qPCR reactions and only 50 ng RNA as assay input
- Specific & Sensitive**
 No cross-reactivity with 350 ug WT RNA and successful detection with 50 copies of fusion templates
- Rapid**
 Total turnaround time approximately 2.5 hours
- Versatile**
 Assay validated in widely used real-time qPCR machines

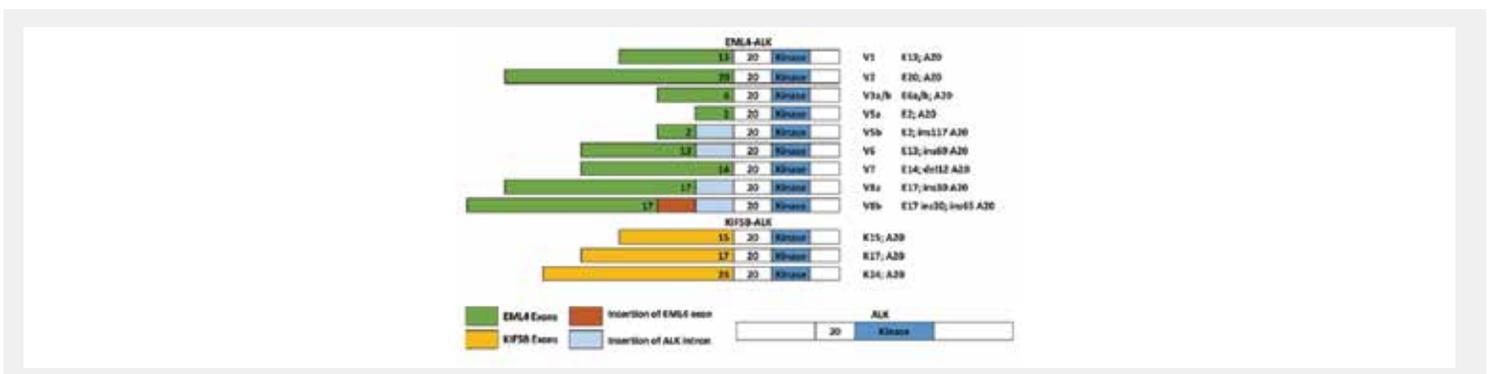


Introduction

EML4-ALK has been emerged as one of the most important driver oncogenes in lung cancer and the first targeted fusion onco-kinase to be identified in 4-6% of lung adenocarcinomas. Other non-EML4 fusion partner genes including KIF5B, TGF, and KLC1 have also been reported. Over the last few years, ALK inhibitors have shown significant benefits in the management of ALK-positive non-small cell lung cancer (NSCLC) compared to conventional chemotherapy.

QFusion™ ALK Fusion Detection kits provide an easy-to-use multiplex RT-qPCR assay that simultaneously detects the most prevalent EML4-ALK and KIF5B gene fusion breakpoints. This highly specific and sensitive assay requires a minimal amount of RNA, and it is a rapid and reliable alternative to the laborious FISH test.

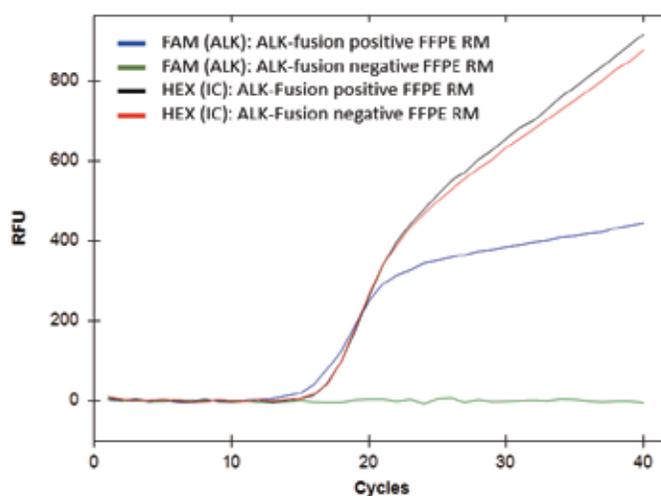
Fusion gene variants detected



Amplification curve

As Figure 1 shows, EML4-ALK fusion gene variant 1 can be successfully detected from the ALK fusion positive FFPE reference material (RM) (blue line) but not the negative RM (green line). The internal control (IC) assay similarly amplifies the positive and negative FFPE RMs (black and red lines), indicating that the total RNA input (50 ng) extracted from these RMs is about the same.

Figure 1. Amplification Curve Generated by QFusion™ for FFPE Reference Materials



Product specifications

Specification	QFusion™ ALK Fusion Detection Kit
Fusion Variants	EML4-ALK: V1, V2, V3a/b, V5a/b, V6,V7, V8a/b KIF5B-ALK: (K15; A20), (K17; A20), (K24; A20)
Sample Type	FFPE tissues from non-small cell lung cancer (minimum 50 ng RNA)
Pack Size	5 Samples, 20 Samples
Instruments Validated	QuantaStudio 5, Roche LC 480 II, and Bio-Rad CFX384
Detection Channel	FAM; HEX
Turnaround Time	qPCR setup: ~ 0.5 hour; assay run time: ~ 2 hours
Stability	Stable for 12 months at -25 °C to -15 °C

Ordering information

Product Name	Catalog # (RUO)	Catalog # (CE/IVD)
QFusion™ EML4-ALK and KIF5B-ALK Fusion Gene Detection Kit (20 Samples)	DC-20-0020R	DC-20-0020E
QFusion™ EML4-ALK and KIF5B-ALK Fusion Gene Detection Kit (5 Samples)	DC-20-005R	DC-20-005E



SCAN TO
LEARN MORE
MDC.11764