

Gene fusions and expression imbalance involving *ALK*, *ROS1*, *RET*, *NTRK1*, *NTRK2*, and *NTRK3* genes are tested using the Idylla Biocartis GeneFusion qualitative detection assay. When appropriate, alterations detected are confirmed by an independent reference method, such as fluorescence in situ hybridization, reverse transcription polymerase chain reaction, or immunohistochemistry staining.

Although this assay tests for the presence of specific fusions, the report will not specify the specific fusion if one is detected. To verify if a specific region/exon/variant is covered by this assay, contact the laboratory at 800-533-1710.

List of Detected Gene Rearrangements		
Gene Fusion Target	Specific Exon Breakpoint Location	Result Reported
EML4::ALK	EML4 exon 2::ALK exon 20	ALK fusion detected
	EML4 exon 6a::ALK exon 20	
	EML4 exon 6b::ALK exon 20	
	EML4 exon 13::ALK exon 20	
	EML4 exon 15::ALK exon 20	
	EML4 exon 17::ALK exon 20	
	EML4 exon 18::ALK exon 20	
	EML4 exon 20::ALK exon 20	
KIF5B::ALK	KIF5B exon 15::ALK exon 20	ROS1 fusion detected
	KIF5B exon 17::ALK exon 20	
	KIF5B exon 24::ALK exon 20	
HIP1::ALK	HIP1 exon 28::ALK exon 20	
	HIP1 exon 30::ALK exon 20	
KLC1::ALK	KLC1 exon 9::ALK exon 20	
TPR::ALK	TPR exon 15::ALK exon 20	
TGF::ALK	TGF exon 4::ALK exon 20	
	TGF exon 6::ALK exon 20	
CD74::ROS1	CD74 exon 6::ROS1 exon 32	
	CD74 exon 6::ROS1 exon 34	
SDC4::ROS1	SDC4 exon 2::ROS1 exon 32	
	SDC4 exon 4::ROS1 exon 32	
	SDC4 exon 4::ROS1 exon 34	
SLC34A2::ROS1	SLC34A2 exon 4::ROS1 exon 32	
	SLC34A2 exon 4::ROS1 exon 34	
	SLC34A2 exon 13::ROS1 exon 32	
EZR::ROS1	EZR exon 10::ROS1 exon 34	
TPM3::ROS1	TPM3 exon 8::ROS1 exon 35	
GOPC::ROS1	GOPC exon 4::ROS1 exon 36	
	GOPC exon 8::ROS1 exon 35	
LRIG3::ROS1	LRIG3 exon 16::ROS1 exon 35	
KIF5B::RET	KIF5B exon 15::RET exon 11	RET fusion detected
	KIF5B exon 15::RET exon 12	
	KIF5B exon 16::RET exon 12	
	KIF5B exon 22::RET exon 12	
	KIF5B exon 23::RET exon 12	
	KIF5B exon 24::RET exon 11	
CCDC6::RET	CCDC6 exon 1::RET exon 12	
MET exon 14 Skipping	MET exon 13::MET exon 15	MET exon 14 skipping detected