

## **Molecular Testing** in Lung Cancer for **Determination of Patient Eligibility for Targeted Therapies**









Testing at ARUP Laboratories



www.aruplab.com

## **ARUP LABORATORIES**

500 Chipeta Way Salt Lake City, UT 84108 Phone: 800-522-2787 Fax: 801-583-2712

keywords: LUNG CANCER

A nonprofit enterprise of the University of Utah and its Department of Pathology

> © 2022 ARUP Laboratories BD-CS-008, Rev 7, January 2022



ARUP's lung cancer testing menu is ideally suited to address gene mutations and translocations identified as actionable therapy targets. Faster turnaround times enable clinicians to provide patients with timely, individualized treatment plans.

		Gene Mutations Emerging Markers Gene Fusions/ Protein																
				CITE IVI			Add'tl					Tran	slocat		Ex	pressio		
		KRAS	ALK	BRAF	EGFR	ERBB2	Genes	ERBB4	AKT1	NRAS	РІКЗСА	ALK	RET	ROS1	ALK	PD-L1	ROS1	
Next-Ger	eration Sequencing Panels				1										,			
3004294	Solid Tumor Mutation Panel, Sequencing						35											Detects mutations in 44 genes, covering >2,400 variants
																		Gene and variant list: ltd.aruplab.com/api/ltd/pdf/375
Point Mu	tation—Digital droplet PCR														I			D
2012868	EGFR T790M Mutation Detection in Circulating Cell-Free DNA				•													Plasma or CSF sample type Guides clinical treatment decisions about acquired resistance to early generation TKIs and decision to switch to EGFR T790M-specific TKIs
Single Ge	ene Assays—Mutation detection by pyros	equen	cing															
2002498	BRAF Codon 600 Mutation Detection																	Covers codon 600 (exon 15)
2002440	EGFR Mutation Detection																	Covers exons 18–21
0040248	KRAS Mutation Detection																	Covers codons 12 and 13 (exon 2) and codon 61 (exon 3)
2003123	NRAS Mutation Detection																	Covers codons 12 and 13 (exon 2) and codon 61 (exon 3)
Immunoh	nistochemistry (IHC)														v			
2007324	ALK (D5F3) with Interpretation																	More cost effective than FISH testing
2011431	ALK (D5F3) with Relfex to FISH														•			If IHC is positive or equivocal, the sample is reflexed to FISH for confirmation.
2013284	PD-L1 22C3 IHC for NSCLC with Interpretation, pembrolizumab (KEYTRUDA)															•		
2013684	PD-L1 28-8 pharmDx by Immunohistochemistry with Interpretation, nivolumab (OPDIVO)															•		
2008414	ROS1 with Interpretation with Reflex to FISH													•				If IHC is equivocal or positive, the sample is reflexed to FISH.
Fluoresco	ent In Situ Hybridization (FISH)																	
3001302	ALK Gene Rearrangements by FISH, Lung																	
3001312	RET Gene Rearrangements by FISH																	
3001308	ROS1 by FISH													•				