



# MOLECULAR CANCER DIAGNOSTIC FOR COMMON SOLID TUMOR TYPES

**[ 12 Genes ]**

**OncoGxSelect™ analyzes a patient’s tumor for genetic mutations frequently found in cancers.**

- Actionable results help guide therapeutic decisions related to targeted cancer therapy.
- Targets the genes frequently mutated in solid tumors including NSCLC, melanoma, thyroid, gastrointestinal and breast.
- Designed to align with well established molecular testing guidelines.
- Detects clinically relevant mutations including select gene fusions and CNVs with high sensitivity and specificity.

### Mutation Types Detected:

- Single Nucleotide Variant (SNV)
- Gene Fusion
- Insertion and Deletion (Indel)
- Copy Number Variation (CNV)

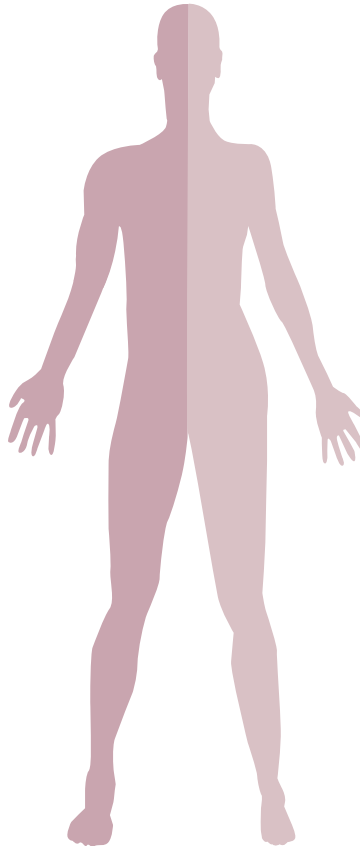
### OncoGxSelect™ Gene List:

ALK	ERBB2	MAP2K1	PIK3CA
BRAF	KIT	MET	RET
EGFR	KRAS	NRAS	ROS1

## Relevant Solid Tumors and Associated Targeted Therapies

Melanoma	
Cobimetinib	Trametinib
Dabrafenib	Vemurafenib
Imatinib	

Non Small Cell Lung Cancer (NSCLC)	
Afatinib	Dabrafenib
Alectinib	Erlotinib
Cabozantinib	Gefitinib
Ceritinib	Trastuzumab
Crizotinib	Vemurafenib



Thyroid	
Cabozantinib	Crizotinib
Ceritinib	Vemurafenib

Breast	
Trastuzumab	

Upper Gastrointestinal Tract	
Trastuzumab	Nimotuzumab

Lower Gastrointestinal Tract	
Imatinib	Cetuximab
Regorafenib	Panitumumab


**Gene Variants:**

Gene	SNV					Fusion	Indel	CNV
<b>ALK</b>	F1174L	L1196M	G1202R	S1206Y	G1269A	EML4-ALK KIF5B-ALK TFG-ALK STRN-ALK	T1151_L1152insT	
<b>BRAF</b>	D594G G469L L597R V600G	D594V G469V L597S V600K	G466V G596R L597V V600M	G469A K601E V600D V600R	G469E L597Q V600E			
<b>ERBB2</b>	G776L						G776_777insVC, A775_G776insYVMA	✓
<b>EGFR</b>	G719A L858R	G719C L861Q	G719S L861R	G776L	T790M		A763_Y764insFQEA L747_P753delinsS G776_777insVC A775_G776insYVMA D770_N771insSVD E746_A750del Exon19_del, Exon20_ins Exon19_ins	✓
<b>KIT</b>	K642E D816H	L576P	W557R	V559A	V559D			✓
<b>KRAS</b>	G12A G12V G13S Q61P	G12C G13A G13V Q61R	G12D G13C Q61H A146V	G12R G13D Q61K	G12S G13R Q61L			
<b>MAP2K1</b>	C121S							
<b>MET</b>						Exon14_skipping		✓
<b>NRAS</b>	G12A G12V G13S Q61P	G12C G13A G13V Q61R	G12D G13C Q61H	G12R G13D Q61K	G12S G13R Q61L			
<b>PIK3CA</b>	E542K	E545K	H1047R					
<b>RET</b>	C634W	C634R	C634Y	M918T		CCDC6-RET NCOA4-RET KIF5B-RET		
<b>ROS1</b>						LRIG3-ROS1 TPM3-ROS1 EZR-ROS1 SDC4-ROS1 GOPC-ROS1 SLC34A2-ROS1 CD74-ROS1		