

## ONCOLOGY FISH

To order individual probes, use ARUP test code 2002298, Chromosome, FISH Interphase, and specify the desired probe(s).

Testing provided by the ARUP Cytogenetics Laboratory			
FISH Probes Available for Oncology Samples			
Indication		Probe Target	Gene(s)/Unique Sequence
Acute Lymphocytic Leukemia Panel (ALL)	Adult: 2002647	8q24	MYC
		t(9;22)(q34;q11.2)	BCR-ABL1
		11q23	KMT2A (MLL)
		14q32	IGH
	Pediatric: 2002719	19p13	TCF3 (E2A)
		+4,+10	CEP4, CEP10
		t(9;22)(q34;q11.2)	BCR-ABL1
		11q23	KMT2A (MLL)
Acute Myelogenous Leukemia Panel (AML): 2011132	t(12;21)(p13;q22)	ETV6-RUNX1 (TEL-AML1)	
	t(15;17)(q24;q21)	PML-RARA	
	t(8;21)(q22;q22)	RUNX1T1-RUNX1 (ETO-AML1)	
	inv(16)(p13.3q22)	CBFB	
	11q23	KMT2A (MLL)	
	inv(3) or t(3;3)	RPN1/MECOM (EVI1)	
	del(5)(q31)	EGR1	
Acute Myelogenous Leukemia with Myelodysplastic Syndrome or Therapy-Related AML Panel: 2002653	del(7)(q31)/-7	D7S486	
	del(5)(q31)	EGR1	
	11q23	KMT2A (MLL)	
Chronic Lymphocytic Leukemia Panel (CLL): 2002295	del(11)(q22.3)	ATM	
	+12	D12Z3	
	del(13)(q14.3)	D13S319	
	del(17)(p13.1)	TP53 (p53)	
Chronic Myelogenous Leukemia (CML): 2002298	t(9;22)(q34;q11.2)	BCR-ABL1, ASS1	
Eosinophilia Panel: 2002378	4q12	PDGFRA-CHIC2-FIP1L1	
	5q33.1	PDGFRB	
	8p12	FGFR1	
	inv(16)	CBFB	
Lymphoma (Aggressive) Panel: 2002650	3q27	BCL6	
	8q24	MYC	
	t(14;18)(q32;q21)	IGH-BCL2	
Lymphoma (probes ordered individually as test code 2002298)	Burkitt	8q24	MYC
	Diffuse large cell	3q27	BCL6
	Follicular	t(14;18)(q32;q21)	IGH-BCL2
	IgH rearrangement	14q32	IGH
	Mantle cell	t(11;14)(q13;q32)	IGH-CCND1
	MALT	18q21	MALT1

## ONCOLOGY FISH continued

### FISH Probes Available for Oncology Samples

Multiple Myeloma Panel: 2002294		1q21	<i>CKS1B</i>
		+9	<i>ASS1</i>
		t(11;14)(q13;q32)	<i>IGH-CCND1</i>
		14q32	<i>IGH</i> rearrangement
		+15	<i>PML</i>
		del(17)(p13.1)	<i>TP53 (p53)</i>
		NOTE: If IGH is positive, additional testing will include:	
		t(4;14)(p16;q32)	<i>IGH-FGFR3</i>
		t(14;16)(q32;q23.1)	<i>IGH-MAF</i>
Myelodysplastic Syndrome Panel (MDS): 2002709		del(5)(q31)	<i>EGR1</i>
		del(7)(q31)/-7	<i>D7S486</i>
		+8	<i>CEP8</i>
		del(20)(q12)	<i>D20S108</i>
Myeloproliferative Disorder Panel (MPD): 2002360		4q12	<i>PDGFRA-CHIC2-FIP1L1</i>
		5q33.1	<i>PDGFRB</i>
		8p12	<i>FGFR1</i>
		t(9;22)(q34;q11.2)	<i>BCR-ABL1</i>
Sarcoma: 2002298	Synovial	18q11.2	<i>SS18 (SYT)</i>
	Ewing	22q12.2	<i>EWSR1</i>
Myxoid Liposarcoma: 2002298		12q13	<i>DDIT3 (CHOP)</i>
Alveolar Rhabdomyosarcoma: 2002298		13q13	<i>FKHR (FOXO1)</i>

## ONCOLOGY FISH TESTING SERVICES

### TEST # TEST NAME/DESCRIPTION

Testing provided by the ARUP Immunohistochemistry Laboratory on Paraffin-Embedded Tissue

2008604	1p/19q Deletion by FISH
2006102	ALK Gene Rearrangements in NSCLC for Crizotinib Eligibility by FISH
2010107	<i>BCL6</i> (3q27) Gene Rearrangement by FISH
2007223	<i>DDIT3 (CHOP)</i> (12q13) Gene Rearrangement by FISH
2008605	<i>EGFR</i> Gene Amplification by FISH
2008603	<i>ERBB2 (HER-2/neu)</i> Gene Amplification by FISH
2007225	<i>EWSR1</i> (22q12) Gene Rearrangement by FISH
2007099	<i>FGFR2</i> Gene Amplification by FISH
2001497	<i>FOXO1 (FKHR)</i> (13q14) Gene Rearrangement by FISH
2001536	<i>IGH-BCL2</i> Fusion, t(14;18) by FISH for Detection in Follicular Lymphoma
2007226	<i>IGH-CCND1</i> Fusion, t(11;14) by FISH for Detection in Mantle Cell Lymphoma
2001538	<i>IGH-MYC</i> Fusion, t(8;14) by FISH for Detection in Burkitt Lymphoma
2003016	<i>MDM2</i> Gene Amplification by FISH
2002345	<i>MYC</i> (8q24) Gene Rearrangement by FISH
2007227	<i>MYCN (N-MYC)</i> Gene Amplification by FISH
2008414	<i>ROS1</i> with Interpretation by Immunohistochemistry with Reflex to FISH if Equivocal
2007222	<i>SS18 (SYT)</i> (18q11) Rearrangement by FISH