

Genetics Associates, LLC
Test Menu

CANCER/LEUKEMIA

Test	CPT Codes
Chromosome Analysis – Bone Marrow	88237 x 2, 88264, 88280 x 2
Chromosome Analysis – Bone Marrow Core	88237 x 2, 88264, 88280 x 2
Chromosome Analysis – Leukemic Blood	88237 x 2, 88264, 88280 x 2
Chromosome Analysis – Lymph Node	88233 x 2, 88264, 88280 x 2
Chromosome Analysis – Mass/Solid Tumor	88233 x 2, 88264, 88280 x 2
Chromosome Analysis – Peritoneal Fluid	88237 x 2, 88264, 88280 x 2
Chromosome Analysis – Pleural Fluid	88237 x 2, 88264, 88280 x 2
Chromosome Analysis – Fixed Pellet	88264, 88280 x 2
Chromosome Analysis – Fine Needle Aspirate	88237 x 1, 88264, 88280 x 2
FISH - Single (Whole Specimen or Pellet)	88271 (per probe), 88275 (per probe)
FISH – Single (Paraffin Embedded Tissue Slides)	88271 (per probe), 88275 (per probe)
FISH – Multi - (Whole Specimen or Pellet)	88271 x 2 (per probe), 88275 (per probe)
FISH – Multi - (Paraffin Embedded Tissue Slides)	88271 (per probe), 88275 (per probe)
FISH - Enriched	88112 (FISH codes will also apply, see above)
Microarray (SNP)	81229
Next Generation Sequencing (NGS)	81450
Polymerase Chain Reaction (PCR) BCR/ABL p210 BKPT	81206
Polymerase Chain Reaction (PCR) BCR/ABL p190 BKPT	81206
Polymerase Chain Reaction (PCR) JAK2	81270
Polymerase Chain Reaction (PCR) FLT3 Mutation Detection	81245, 81246
IgVH Hypermutation Analysis (Sendout Test)	81263
T-Cell Clonality Assessment (Sendout Test)	81340, 81342
B-Cell Clonality Assessment (Sendout Test)	81264, 81261

See below for list of FISH probes by profile and in numerical order and a list of NGS panels.

FISH Probe Profiles

Adult B-Cell ALL Profile

del(9p) CDKN2A
del(6q) MYB
t(9;22) BCR/ABL1/ASS1
11q23 KMT2A (MLL) rearrangements
t(1;19) TCF3/PBX1
14q32 IGH rearrangements

Adult T-Cell ALL Profile

14q11.2 TRA rearrangements
7q34 TRB rearrangements
10q24 TKX1
5q35 TLX3
11q23 KMT2A (MLL) rearrangements
del(9p) CDKN2A

Pediatric ALL Profile (COG)

t(12;21) ETV6/RUNX1
11q23 KMT2A (MLL) rearrangements
t(9;22) BCR/ABL1/ASS1
trisomy 4,10,17
14q32 IGH rearrangement
Additional Probes
t(1;19) TCF3/PBX1

Ph-Like ALL Profile

1q25.2 ABL2
5q32 PDGFRB
5q32 CSF1R
9p24.1 JAK2
9q34.1 ABL1
19p13.2 EPOR
Xp22.33/Yp11.3 CRFL2

Acute Myelogenous (AML) Profile t(15;17) PML/RARA t(9;22) BCR/ABL1/ASS1 t(8;21) RUNX1T1/RUNX1 11q23 KMT2A (MLL) rearrangements inv(16), t(16;16) CBFB rearrangements inv(3) MECOM rearrangements 17q RARA rearrangements NUP98 11p15	CLL Lymphocytic (CLL) Profile (CD19+ Clones Available) del(11q) ATM trisomy 12 del(13q) 13q14/13q34 del(17p) TP53 Additional Probes t(11;14) CCND1/IGH del(6q) MYB
Chronic Myelogenous (CML) Profile t(9;22) BCR/ABL1/ASS1 Additional probes trisomy 8 i(17q)	Lymphoma Probes (CD19+ Clones Available) t(8;14) MYC/IGH (Burkitt or Follicular) 8q24 MYC rearrangements t(11;14) CCND1/IGH (Mantle Cell) t(11;18) BIRC3/MALT1 18q21 BCL2 rearrangements 18q21 MALT1 rearrangements t(14;18) IGH/BCL2 (Follicular or Diffuse Large B-Cell) 3q27 BCL6 rearrangements (Diffuse Large B-Cell, Follicular Marginal Zone B-cell)
T-cell Leukemia/Lymphoma Probes 2p23 ALK (Anaplastic) rearrangements 14q11.2 TRA rearrangements 7q35 TRB rearrangements i(7q) 7cen/7q22/7q31 14q32 TCL1A 10q24 TLX1 5q35 TLX3	Multiple Myeloma CD138 Enriched (MM) Profile 1p32.3/1q21 CDKN2C/CKS1B del(13q) 13q14/13q34 del(17p) TP53 t(11;14) CCND1/IGH t(4;14) FGFR3/IGH t(14;16) IGH/MAF Additional Probes trisomy 5 8q24 MYC rearrangements t(6;14) CCND3/IGH t(14;20) IGH/MAFB
Myelodysplastic (MDS) Profile del(5q) EGR1 del(7q) trisomy 8 del(20q) Additional Probes 11q23 KMT2A (MLL) rearrangements t(9;22) BCR/ABL1/ASS1 NUP98 11p15 12p13 ETV6 rearrangements	Myeloproliferative (MPN) Profile del(5q) EGR1 del(7q) trisomy 8 del (20q) t(9;22) BCR/ABL1/ASS1 Additional Probes 4q12 FIP1L1/CHIC2/PDGFR 5q32 PDGFRB rearrangements 8p11 FGFR1 rearrangements 9q24 JAK2 rearrangements
Solid Tumor Probes EWSR1 Ewing Sarcoma FOXO1 Alveolar Rhabdomyosarcoma DDIT3 (CHOP) Myxoid Liposarcoma LOH 1p/19q Glioma MYCN 2p24.1 Neuroblastoma SS18 Synovial Sarcoma	Transplant XX/XY for sex mismatched transplants

Bladder Cancer Screening

Trisomy 3, 7, 17, & 9p21 loss

Chromosome #	Probe	Location on Cancer Requisition
1	1p32.3/1q21 CDKN2C/CKS1B	Multiple Myeloma Profile
1	1q25.2 ABL2	Ph Like ALL profile
1, 19	t(1;19) TCF3/PBX1	Adult B-Cell ALL profile
		Pediatric ALL profile
1, 19	1p/19q LOH (Glioma)	Solid Tumor probes
2	2p23 ALK (Anaplastic) rearrangements	T-cell Leukemia/Lymphoma probes
2	2p24.1 MYCN (Neuroblastoma)	Solid Tumor probes
3	inv(3) MECOM rearrangements	Acute Myelogenous (AML) profile
3	3q27 BCL6 rearrangements (Diffuse Large B-Cell, Follicular, Marginal Zone B-cell)	Lymphoma probes
4, 10, 17	trisomy 4,10,17	Pediatric ALL profile
4	4q12 FIP1L1/CHIC2/PDGFRA	Myeloproliferative (MPN) profile
4, 14	t(4;14) FGFR3/IGH	Multiple Myeloma Profile
5	del(5q) EGR1 / trisomy 5	Multiple Myeloma Profile
		Myeloproliferative (MPN) profile
		Myelodysplastic (MDS) profile
5	5q33 PDGFRB rearrangements	Multiple Myeloma Profile
		Ph Like ALL Profile
5	5q32 CSF1R	Ph Like ALL Profile
5	5q35 TLX3	Adult T-Cell ALL profile
6	del(6q) MYB	Adult B-Cell ALL profile
		Chronic Lymphocytic (CLL) profile
6, 14	t(6;14) CCND3/IGH	Multiple Myeloma Profile
7	del(7q)	Myelodysplastic (MDS) profile
		Myeloproliferative (MPN) profile
7	i(7q) 7cen/7q22/7q31	T-cell Leukemia/Lymphoma probes
7	7q34 TRB rearrangements	Adult T-Cell ALL profile
		T-cell Leukemia/Lymphoma probes
8	trisomy 8	Chronic Myelogenous (CML) profile
		Myelodysplastic (MDS) profile
		Myeloproliferative (MPN) profile
8	8p11 FGFR1 rearrangements trisomy 8	Myeloproliferative (MPN) profile
8	8q24 MYC rearrangements	Lymphoma probes
8,14	t(8;14) MYC/IGH (Burkitt or Follicular)	Lymphoma probes
8, 21	t(8;21) RUNX1T1/RUNX1	Acute Myelogenous (AML) profile
9	9p24 JAK2 rearrangements	Myeloproliferative (MPN) profile
9	del(9p) CDKN2A	Adult B-Cell ALL profile
		Adult T-Cell ALL profile
9	9q34.1 ABL1	Ph Like ALL Profile
9, 22	t(9;22) BCR/ABL1/ASS1	Adult B-Cell ALL profile
		Pediatric ALL profile
		Acute Myelogenous (AML) profile
		Chronic Myelogenous (CML) profile
		Myelodysplastic (MDS) profile
		Myeloproliferative (MPN) profile
10	10q24 TLX1	Adult T-Cell ALL profile
		T-cell Leukemia/Lymphoma probes

11	NUP98 11p15	Acute Myelogenous (AML) profile
		Myelodysplastic (MDS) profile
11	del(11q) ATM	Chronic Lymphocytic (CLL) profile
11	11q23 KMT2A (MLL) rearrangements	Myelodysplastic (MDS) profile
		Adult B-Cell ALL profile
		Adult T-Cell ALL profile
		Pediatric ALL profile
		Acute Myelogenous (AML) profile
11, 14	t(11;14) CCND1/IGH	Chronic Lymphocytic (CLL) profile
	t(11;14) CCND1/IGH (Mantle Cell)	Lymphoma probes
	t(11;14) CCND1/IGH	Multiple Myeloma Profile
11, 18	t(11;18) BIRC3/MALT1	Lymphoma probes
12	trisomy 12	Chronic Lymphocytic (CLL) profile
12	12p13 ETV6 rearrangements	Myelodysplastic (MDS) profile
12	12q13 DDIT3 (CHOP) Myxoid Liposarcoma	Solid Tumor probes
12, 21	t(12;21) ETV6/RUNX1	Pediatric ALL profile
13	del(13q) 13q14/13q34	Chronic Lymphocytic (CLL) profile
		Multiple Myeloma Profile
13	13q14.1 FOXO1 Alveolar Rhabdomyosarcoma	Solid Tumor probes
14	14q11.2 TRA rearrangements	Adult T-Cell ALL profile
		T-cell Leukemia/Lymphoma probes
14	14q32 IGH rearrangements	Adult B-Cell ALL profile
		Pediatric ALL profile
14	14q32 TCL1A	T-cell Leukemia/Lymphoma probes
14, 16	t(14;16) IGH/MAF	Multiple Myeloma Profile
14, 18	t(14;18) IGH/BCL2 (Follicular or Diffuse Large B-Cell)	Lymphoma probes
14, 20	t(14;20) IGH/MAFB	Multiple Myeloma Profile
15, 17	t(15;17) PML/RARA	Acute Myelogenous (AML) profile
16	inv(16), t(16;16) CBFB rearrangements	Acute Myelogenous (AML) profile
17	del(17p) TP53	Chronic Lymphocytic (CLL) profile
	del(17p) TP53	Multiple Myeloma Profile
17	i(17q)	Chronic Myelogenous (CML) profile
17	17q RARA rearrangements	Acute Myelogenous (AML) profile
18	18q11.2 SS18 Synovial Sarcoma	Solid Tumor probes
18	18q21 BCL2 rearrangements	Lymphoma probes
18	18q21 MALT1 rearrangements	Lymphoma probes
19	19p13.2 EPOR	Ph Like Profile
20	del(20q)	Myelodysplastic (MDS) profile
		Myeloproliferative (MPN) profile
22	22q12.2 EWSR1 Ewing Sarcoma	Myeloproliferative (MPN) profile
3, 7, 9, 17	Bladder Cancer Screening	Solid Tumor probes
X/Y	CEPXY (XX/XY for sex mismatched transplant)	Transplant
X/Y	Xp22.33/Yp11.3 CRFL2	Ph Like ALL Profile

Panel	Included Genes
AML Molecular Profile	ASXL1, CBL, CEBPA, CSF3R, DNMT3A, EZH2, IDH1, IDH2, JAK2, KIT, KRAS, MPL, NPM1, NRAS, RUNX1, SETBP1, SF3B1, SRSF2, TET2, TP53, U2AF1
MDS Molecular Profile	ASXL1, CBL, DNMT3A, EZH2, IDH1, IDH2, JAK2, KIT, KRAS, MPL, NPM1, NRAS, RUNX1, SETBP1, SF3B1, SRSF2, TET2, TP53, U2AF1
MPN Molecular Profile	ABL1, ASXL1, CALR, CBL, CSF3R, EZH2, IDH1, IDH2, JAK2, MPL, SETBP1, SF3B1, SRSF2, TET2, TP53, U2AF1

Myeloid Molecular Profile (24-gene)

ABL1, ASXL1, BRAF, CALR, CBL, CEBPA, CSF3R, DNMT3A, EZH2, IDH1, IDH2, JAK2, KIT, KRAS, MPL, NPM1, NRAS, RUNX1, SETBP1, SF3B1, SRSF2, TET2, TP53, U2AF1

Myeloid Comprehensive Molecular Profile (56-gene)

ABL1, ANKRD26, ASXL1, ATM, BCOR, BCORL1, BIRC3, BRAF, CALR, CARD11, CBL, CDKN2A, CEBPA, CSF3R, CXCR4, DDX41, DNMT3A, ELANE, ETV6, EZH2, FBXW7, FLT3, GATA2, IDH1, IDH2, IKZF1, JAK2, KIT, KRAS, MAP2K1, MPL, MYD88, NF1, NOTCH1, NPM1, NRAS, PHF6, PIGA, PPM1D, PRPF8, PTEN, PTPN11, RUNX1, SAMD9L, SETBP1, SF3B1, SH2B3, SRSF2, STAG2, STAT3, TET2, TP53, U2AF1, UBA1, WT1, ZRSR2

CONSTITUTIONAL/PRENATAL

Test	CPT Codes
Chromosome Analysis – Amniotic Fluid	88235 X 2, 88267, 88261, 88280
Chromosome Analysis – Chorionic Villus	88235 X 2, 88267, 88261, 88280, 88172
Chromosome Analysis – Fixed Pellet	88262, 88280 x 2
Chromosome Analysis – Newborn Peripheral Blood Prelim	88230 x 2, 88262, 88280
Chromosome Analysis – Peripheral Blood	88230 x 2, 88262, 88280
Chromosome Analysis – POC	88233x2, 88261, 88267, 88280
Chromosome Analysis – Tissue	88233 x 2, 88264, 88280 x 3
Microarray (SNP)	81229
FISH – Microdeletion	88271, 88273
FISH – Aneuploidy Screening – Amniotic Fluid	88271 x 5, 88275
FISH – Aneuploidy Screening – Paraffin Embedded Slides	88271 x 5, 88275
FISH – Products of Conception Tissue, POC FISH	88271 x 8, 88275 x 2
FISH – Products of Conception – Paraffin Embedded Slides	88271 x 8, 88275 x 2
Cystic Fibrosis (Sendout Test)	Known Mutation: 81221 Full Genes: 81223 Common Gene Variant: 81220
Fragile X	81243, 81244
AZF-Y Microdeletion	81381
Thrombophilia Panel (Factor II, Factor V, MTHFR)	81240, 81241

Constitutional/Prenatal Probes	
FISH Microdeletion Syndrome Probes	FISH Panels
Angelman (15q12)	Aneuploidy Screen (X, Y, 13, 18, 21)
Cri-du-Chat (5p15.3)	POC FISH (X, Y, 13, 15, 16, 18, 21, 22)
DiGeorge (22q11.2)	
DiGeorge II (10p14)	
Kallmann (Xp22.3)	
Miller-Dieker (17p13.3)	
Pallister-Killian/Tetrasomy 12p	
	Sex Chromosome Abnormality Probes
	CEPX/SRY (Genotypic Sex Determination)
	CEPX/CEPY (Turner Syndrome/Mosaicism)

Phelan-McDermid (22q13)	Trisomy Probes
Prader-Willi (15q12)	Trisomy 13 – Patau Syndrome
Saethre-Chotzen (7p21.1)	Trisomy 18 – Edwards Syndrome
Smith-Magenis (17p11.2)	Trisomy 21 – Down Syndrome
Sotos (5q35.3)	
Steroid Sulfatase Deficiency (Xp22.3)	
Williams (7q11.23)	
Wolf-Hirschhorn (4p16.3)	
1p36 microdeletion	