

CELL PANEL

LEUKEMIA CELL LINE PANEL

The Leukemia Cell Line Panel (ATCC® [TCP-1010™](#)) is composed of 7 leukemia cell lines representing Acute Myeloid Leukemia (AML), Acute Monocytic Leukemia (AMoL), Chronic Myeloid Leukemia (CML), and Acute Lymphoblastic Leukemia (ALL). Each culture contains genomic mutations in one or more of the following genes according to the Sanger COSMIC database: CDKN2A, KDM6A, TP53, NRAS, NOTCH1, PTEN, FBXW7, FLT3, KRAS, MLH1, and PIK3R1. The table below provides more information for the cell lines included in this panel.

ATCC® No.	Name	Tumor Source	Disease	Mutant Gene	Zygoty	Gene Sequence	Protein Sequence
CRL-2724™	KASUMI-1	primary	acute myeloid leukemia (AML)	TP53	homozygous	c.743G>A	p.R248Q
CCL-240™	HL-60	primary	acute myeloid leukemia (AML)	CDKN2A NRAS TP53	homozygous heterozygous homozygous	c.238C>T c.182A>T c.1_1182del1182	p.R80* p.Q61L p.0?
TIB-202™	THP-1	primary	acute monocytic leukemia (AMoL)	CDKN2A KDM6A NRAS	homozygous homozygous heterozygous	c.1_471del471 c.1_1923del1923 c.35G>A	p.0? p.0 p.G12D
CCL-243™	K-562	primary	chronic myeloid leukemia (CML)	CDKN2A TP53	homozygous homozygous	c.1_471del471 c.406_407insC	p.0? p.Q136fs*13
CRL-1873™	RS4;11	metastasis	acute lymphoblastic leukemia (ALL)	CDKN2A	homozygous	c.1_471del471	p.0?
CRL-1582™	MOLT-4	primary	acute lymphoblastic leukemia (ALL)	CDKN2A NOTCH1 NRAS PIK3R1 PTEN TP53	homozygous heterozygous heterozygous heterozygous homozygous heterozygous	c.1_471del471 c.7544_7545delCT c.34G>T c.1355_1363>CTGGAGGGAGTAGGATTA c.800delA c.916C>T	p.0? p.P2515fs*4 p.G12C p.Y452_Q455>SGGSRIK p.K267fs*9 p.R306*
CCL-119™	CCRF-CEM	primary	acute lymphoblastic leukemia (ALL)	CDKN2A FBXW7 FLT3 KRAS MLH1 MLH1 NOTCH1 PTEN TP53 TP53	homozygous heterozygous heterozygous heterozygous heterozygous heterozygous heterozygous homozygous heterozygous heterozygous	c.1_471del471 c.1393C>T c.1879G>A c.35G>A c.298C>T c.790+1G>A c.4783_4784ins36 c.80_492del413 c.524G>A c.743G>A	p.0? p.R465C p.A627T p.G12D p.R100* p.? p.R1595>PRLPHNSSF-HFLR p.? p.R175H p.R248Q

The mutation data was obtained from the Sanger Institute Catalogue Of Somatic Mutations In Cancer web site, <http://www.sanger.ac.uk/cosmic> Bamford *et al* (2004) The COSMIC (Catalogue of Somatic Mutations in Cancer) database and website. Br J Cancer, 91,355-358. ATCC and The Sanger Institute provide these data in good faith, but make no warranty, express or implied, nor assumes any legal liability or responsibility for any purpose for which the data are used.