



## GENOMIC DNA FROM HUMAN CELL LINES

ATCC provides a growing selection of nucleic acids isolated from some of our most frequently used cell lines in research. We are pleased to announce the availability of our new KRAS CRM nucleic acids, representing the seven mutations observed in tumor biology, including a wild type KRAS CRM control. ATCC Certified Reference Materials (CRM) are produced under ISO Guide 34:2009, and ISO/IEC 17025:2005 accredited and ISO 9001:2008 certified laboratories.

### Human KRAS DNA Certified Reference Material

ATCC® No.	Cell Line	Description	Gene Sequence <sup>†</sup>	Protein Sequence <sup>†</sup>
CRM-CCL-185D™	A549	Lung carcinoma	c.34G>A	p.G12S
CRM-HTB-174D™	NCI-H441	Lung adenocarcinoma	c.35G>T	p.G12V
CRM-CCL-155D™	RPMI 8226	Myeloma	c.35G>C	p.G12A
CRM-CCL-119D™	CCRF-CEM	Leukemia, acute lymphoblastic	c.35G>A	p.G12D
CRM-HTB-26D™	MDA-MB-231	Breast adenocarcinoma	c.38G>A	p.G13D
CRM-CRL-1420D™	MIA PaCa-2	Pancreatic carcinoma	c.34G>T	p.G12C
CRM-CRL-3211D™	PSN 1	Pancreatic adenocarcinoma	c.34G>C	p.G12R
CRM-TIB-161D™	HuT78	Lymphoblast, Sezary Syndrome	KRAS wild type	KRAS wild type

Testing performed for each ATCC cell line was completed on current (2013) distribution material. ATCC provides these data in good faith, but makes no warranty, express or implied, nor assumes any legal liability or responsibility for any purpose for which the data are used.

### Nucleic Acids from Human Cell Lines\*

ATCC® No.	Cell Line	Description	Genes	Zygosity	Gene Sequence <sup>†</sup>	Protein Sequence <sup>†</sup>
45507™	K-562 (CCL-243)	Leukemia, chronic myelogenous	--	--	--	--
CCL-123D™	C 211	Skin, Cri Du Chat	--	--	--	--
CCL-240D™	HL-60	Leukemia, acute promyelocytic	CDKN2A TP53	Homozygous Homozygous	c.238C>T c.1_1182del1182	p.R80* p.O?
CCL-243D™	K-562	Leukemia, chronic myelogenous	CDKN2A TP53	Homozygous Homozygous	c.1_471del471 c.406_407insC	p.O? p.Q136fs*13
CCL-256.1D™	NCI-BL2126	B Lymphoblast	--	--	--	--
CCL-256D™	NCI-H2126	Carcinoma, non-small cell	CDKN2A TP53	Homozygous Homozygous	c.1_471del471 c.184G>T	p.O? p.E62*
CCL-54D™	Detroit 532	Skin, Down Syndrome	--	--	--	--
CCL-65D™	Detroit 525	Skin, Turner Syndrome	--	--	--	--
CCL-66D™	Detroit 529	Skin	--	--	--	--
CRL-11147D™	A2058	Melanoma, malignant	BRAF PTEN PTEN TP53	Heterozygous Heterozygous Heterozygous Homozygous	c.1799T>A c.335T>A c.524_558del35 c.820G>T	p.V600E p.L112Q p.V175fs*3 p.V274F
CRL-11609D™	RWPE-1	Prostate	--	--	--	--
CRL-11610D™	RWPE-2	Prostate	--	--	--	--

\*For a description of the sequence variation nomenclature please refer to: den Dunnen JT and Antonarakis SE (2000), *Hum. Mutat.* 15:7-12.

**Nucleic Acids from Human Cell Lines\*(continued)**

ATCC® No.	Cell Line	Description	Genes	Zygoty	Gene Sequence†	Protein Sequence†
CRL-11731D™	TOV-112D	Ovary	--	--	--	--
CRL-1424D™	G-361	Melanoma, malignant	BRAF CDKN2A	Heterozygous Homozygous	c.1799T>A c.1_471del471	p.V600E p.O?
CRL-1435D™	PC-3	Adenocarcinoma	PTEN TP53	Homozygous Homozygous	c.165_1212del1048 c.414delC	p.R55fs*1 p.K139fs*31
CRL-1500D™	ZR-75-1	Breast carcinoma	--	--	--	--
CRL-1504D™	ZR-75-30	Carcinoma, ductal	PIK3R1	Homozygous	c.335_427del93	p.?
CRL-1573D™	293	Embryonic kidney	--	--	--	--
CRL-1675D™	WM-115	Melanoma	BRAF CDKN2A PTEN	Heterozygous Homozygous Homozygous	c.1799_1800TG>AT c.1_150del150 c.493_634del142	p.V600D p.? p.?
CRL-1740D™	LNCaP clone FGC	Prostate carcinoma	PTEN	Homozygous	c.17_18delAA	p.K6fs*4
CRL-1897D™	UACC-812	Breast carcinoma	--	--	--	--
CRL-1902D™	UACC-893	Carcinoma, primary ductal	PIK3CA TP53	Heterozygous Homozygous	c.3140A>G c.1024C>T	p.H1047R p.R342*
CRL-2098D™	SJSA-1	Osteosarcoma	--	--	--	--
CRL-2221D™	PZ-HPV-7	Prostate	--	--	--	--
CRL-2235D™	SNU-182	Liver cancer	--	--	--	--
CRL-2314D™	HCC38	Carcinoma, primary ductal	CDKN2A TP53	Homozygous Homozygous	c.1_471del471 c.818G>T	p.O? p.R273L
CRL-2319D™	HCC1007 BL	Lymphoblast	--	--	--	--
CRL-2320D™	HCC1008	Breast ductal carcinoma	--	--	--	--
CRL-2321D™	HCC1143	Carcinoma, primary ductal	TP53	Homozygous	c.743G>A	p.R248Q
CRL-2322D™	HCC1187	Carcinoma, primary ductal	TP53	Homozygous	c.322_324delGGT	p.G108del
CRL-2323D™	HCC1187 BL	Lymphoblast	--	--	--	--
CRL-2324D™	HCC1395	Carcinoma, primary ductal	CDKN2A PTEN TP53	Homozygous Homozygous Homozygous	c.1_471del471 c.635_1212del578 c.524G>A	p.O? p.N212fs*1 p.R175H
CRL-2325D™	HCC1395 BL	Lymphoblast	--	--	--	--
CRL-2331D™	HCC1599	Carcinoma, primary ductal	TP53	Homozygous	c.673-2A>T	p.?
CRL-2337D™	HCC1937 BL	Lymphoblast	--	--	--	--
CRL-2339D™	HCC1954 BL	Lymphoblast	--	--	--	--
CRL-2340D™	HCC2157	Carcinoma, primary ductal	TP53	Homozygous	c.742C>T	p.R248W
CRL-2341D™	HCC2157 BL	Lymphoblast	--	--	--	--
CRL-2343D™	HCC2218	Carcinoma, primary ductal	TP53	Homozygous	c.847C>T	p.R283C
CRL-2346D™	HCC38 BL	Lymphoblast	--	--	--	--
CRL-2362D™	HCC1143 BL	Lymphoblast	--	--	--	--
CRL-2363D™	HCC2218 BL	Lymphoblast	--	--	--	--
CRL-2422D™	MDA PCa 2b	Prostate carcinoma	--	--	--	--
CRL-2505D™	22Rv1	Prostate carcinoma	PIK3CA TP53	Heterozygous Heterozygous	c.1637A>G c.992A>G	p.Q546R p.Q31R
CRL-2704D™	C13589	Lymphoblast	--	--	--	--
CRL-5807D™	NCI-H358	Lung, bronchioalveolar	--	--	--	--
CRL-5811D™	NCI-H526	Carcinoma, small cell variant	RB1 TP53	Homozygous Homozygous	c.91G>T c.97-1G>C	p.E31* p.?
CRL-5868D™	NCI-H1395	Lung adenocarcinoma	BRAF	Homozygous	c.1406G>C	p.G469A

†For a description of the sequence variation nomenclature please refer to: den Dunnen JT and Antonarakis SE (2000), *Hum. Mutat.* 15:7-12.

## Nucleic Acids from Human Cell Lines\* (continued)

ATCC® No.	Cell Line	Description	Genes	Zygosity	Gene Sequence <sup>†</sup>	Protein Sequence <sup>†</sup>
CRL-5957D™	NCI-BL1395	EBV-B cell	--	--	--	--
HB-8064D™	Hep 3B2.1-7	Liver cancer	--	--	--	--
HB-8065D™	Hep G2	Liver cancer	--	--	--	--
HTB-119D™	NCI-H69	Carcinoma, small cell	PIK3CA RB1 TP53	Heterozygous Homozygous Homozygous	c.317_325del9 c.2242G>T c.511G>T	p.G106_R108del p.E748* p.E171*
HTB-121D™	BT-483	Mammary, ductal carcinoma	--	--	--	--
HTB-126D™	Hs 578T	Breast carcinoma	--	--	--	--
HTB-128D™	MDA-MB-415	Mammary gland adenocarcinoma	PTEN TP53	Homozygous Homozygous	c.407G>A c.707A>G	p.C136Y p.Y236C
HTB-129D™	MDA-MB-435S	Melanoma, amelanotic	BRAF CDKN2A CDKN2A TP53	Heterozygous Heterozygous Heterozygous Heterozygous	c.1799T>A c.150+2T>C c.456_457+25AGGTGAGGACTGATGATCTGAGAATT>C c.797G>A	p.V600E p.? p.? p.G266E
HTB-133D™	T-47D	Carcinoma, ductal	PIK3CA TP53	Heterozygous Homozygous	c.3140A>G c.580C>T	p.H1047R p.L194F
HTB-20D™	BT-474	Carcinoma, ductal	PIK3CA TP53	Heterozygous Homozygous	c.333G>C c.853G>A	p.K111N p.E285K
HTB-22D™	MCF7	Breast adenocarcinoma	CDKN2A PIK3CA	Homozygous Heterozygous	c.1_471del471 c.1633G>A	p.0? p.E545K
HTB-25D™	MDA-MB-175-VII	Ductal carcinoma	--	--	--	--
HTB-26D™	MDA-MB-231	Breast adenocarcinoma	BRAF CDKN2A RAS TP53	Heterozygous Homozygous Heterozygous Homozygous	c.1391G>T c.1_471del471 c.38G>A c.839G>A	p.G464V p.0? p.G13D p.R280K
HTB-30D™	SK-BR-3	Breast adenocarcinoma	--	--	--	--
HTB-38D™	HT-29	Colon adenocarcinoma	APC APC BRAF PIK3CA SMAD4 TP53	Heterozygous Heterozygous Heterozygous Heterozygous Homozygous Homozygous	c.2557G>T c.4666_4667insA c.1799T>A c.1345C>A c.931C>T c.818G>A	p.E853* p.T1556fs*3 p.V600E p.P449T p.Q311* p.R273H
HTB-72D™	SK-MEL-28	Melanoma, malignant	BRAF EGFR TP53	Homozygous Homozygous Homozygous	c.1799T>A c.2257C>T c.434_435TG>GT	p.V600E p.P753S p.L145R
HTB-81D™	DU 145	Prostate carcinoma	CDKN2A RB1 TP53 TP53	Homozygous Homozygous Heterozygous Heterozygous	c.250G>T c.2143A>T c.668C>T c.820G>T	p.D84Y p.K715* p.P223L p.V274F
TIB-202D™	THP-1	Leukemia, acute monocytic	CDKN2A RAS TP53	Homozygous Heterozygous Homozygous	c.1_471del471 c.35G>A c.520_545del26	p.0? p.G12D p.R174fs*3

\*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.

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