



BONE CANCER PANEL

The Bone Cancer Panel (ATCC® No. TCP-1009™) is comprised of 5 bone cancer cell lines with varying degrees of genetic complexity. Four lines contain genomic mutations in one or more of the following genes according to the Sanger COSMIC database: CDKN2A, BRAF, TP53, RB1, and PTEN. One cell line without coding mutations serves as a control. The table below provides more information for the cell lines included in this panel.

ATCC® No.	Name	Histology	Tumor Source	Mutant Gene	Zygoty	Gene Sequence	Protein Sequence
CRL-1598™	A673	Ewing's sarcoma	primary	BRAF	heterozygous	c.1799T>A	p.V600E
				CDKN2A	homozygous	c.1_471del471	p.0?
				TP53	homozygous	c.354_355insCA	p.A119fs*5
CRL-1543™	HOS	osteosarcoma	primary	CDKN2A	homozygous	c.1_471del471	p.0?
				TP53	homozygous	c.467G>C	p.R156P
HTB-85™	Saos-2	osteosarcoma	primary	RB1	homozygous	c.2212_2787del576	p.?
				TP53	homozygous	c.1_1182del1182	p.0?
CRL-2139™	SK-PN-DW	Ewing's sarcoma	primary	PTEN	homozygous	c.1_79del79	p.?
			primary	RB1	homozygous	c.234G>A	p.W78*
			primary	TP53	homozygous	c.527G>T	p.C176F
HTB-96™	U-2 OS	osteosarcoma	primary	There are no coding mutations in CDKN2A, TP53, RB1, PTEN, and BRAF. Also, according to the Sanger COSMIC database, mutations have not been detected for this cell line in another 59 genes.			