

CELL PANEL

LUNG CANCER PANEL

The Lung Cancer Panel (ATCC® [TCP-1016™](#)) is composed of seven lung cancer cell lines. They have genomic mutations in one or more of the following genes according to the Sanger COSMIC database: CDKN2A, EGFR, KRAS, NRAS, PIK3CA, PIK3R1, SMARCA4, STK11, and TP53. 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-5803™	NCI-H1299	Large cell carcinoma	metastasis, lymph node	NRAS	heterozygous	c.181C>A	p.Q61K
CRL-5875™	NCI-H1563	Non-small-cell lung carcinoma (NSCLC)	primary	CDKN2A	homozygous	c.1_471del471T	p.0?
CRL-5872™	NCI-H1437	Non-small-cell lung carcinoma (NSCLC)	metastasis, pleural effusion	CDKN2A	homozygous	c.1_471del471	p.0?
				TP53	homozygous	c.800G>C	p.R267P
HTB-183™	NCI-H661	Large cell carcinoma	metastasis, lymph node	CDKN2A	homozygous	c.457+1G>T	p.?
				SMARCA4	homozygous	c.3480delG	p.L1161fs*3
				TP53	homozygous	c.473G>T	p.R158L
				TP53	heterozygous	c.644G>T	p.S215I
CCL-256™	NCI-H2126	Non-small-cell lung carcinoma (NSCLC)	metastasis, pleural effusion	CDKN2A	homozygous	c.1_471del471	p.0?
				STK11	homozygous	c.465_862del398	p.?
				TP53	homozygous	c.184G>T	p.E62*
CRL-5877™	NCI-H1573	Adenocarcinoma	metastasis, soft tissue	KRAS	heterozygous	c.35G>C	p.G12A
				PIK3R1	heterozygous	c.211G>T	p.G71*
				SMARCA4	homozygous	c.4195G>T	p.E1399*
				TP53	homozygous	c.743G>T	p.R248L
CRL-5908™	NCI-H1975	Non-small-cell lung carcinoma (NSCLC)	primary	CDKN2A	homozygous	c.205G>T	p.E69*
				EGFR	heterozygous	c.2369C>T	p.T790M
				EGFR	heterozygous	c.2573T>G	p.L858R
				PIK3CA	heterozygous	c.353G>A	p.G118D
				TP53	homozygous	c.818G>A	p.R273H

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. The ATCC trademark and trade name, any and all ATCC catalog numbers, and any other trademarks listed are trademarks of the American Type Culture Collection unless indicated otherwise. ATCC products are intended for laboratory research only. They are not intended for use in humans, animals or diagnostics.