

Product Name:

- o Normal Male cfDNA
- o Normal Female cfDNA
- o Normal PBMC cfDNA
- o cfDNA Extraction Control

- o cfDNA Size Control

- Part No.: 60133001, 60133501
- Part No.: 60133002, 60133502
- Part No.: 60133003, 60133503
- Part No.: 60100540, 60100545
- 60100544, 60100551, 60100555
- Part No.: 60100001 to 60100003

Storage Condition: 2-8°C for short term (<3 months), -20°C for two years

Shipping Condition: Blue Ice.

Shelf Life: Two years from the date of receipt under proper storage conditions.

Description

- **Normal Male cfDNA.** DNA is extracted and fragmented from a popular normal male cell line. The DNA is dissolved in either 1xTE (10 mM Tris pH 8.0, 1 mM EDTA) buffer (PN 60133001) or DNA-free EDTA plasma (PN 60133501)
- **Normal Female cfDNA.** DNA is extracted and fragmented from a normal female cell line, PAM3005. The DNA is dissolved in either 1xTE (10 mM Tris pH 8.0, 1 mM EDTA) buffer (PN 60133002) or DNA-free EDTA plasma (PN 60133502)
- **Normal PBMC cfDNA.** DNA is extracted and fragmented from pooled normal PBMC from fresh blood. The DNA is dissolved in either 1xTE (10 mM Tris pH 8.0, 1 mM EDTA) buffer (PN 60133003) or DNA-free EDTA plasma (PN 60133503)
- **cfDNA Extraction Control.** They are either ctDNA spiked in plasma at a fixed allele frequency (Panel 1) or wild-type cfDNA spiked in plasma at a fixed concentration (Panel 2). They are used as controls to help monitor cfDNA extraction efficiency from real human plasma, determine how low the absolute number of copies can be reliably extracted, and standardize the QC workflow for the cfDNA extraction process. In Panel 1, the mutations included:

APC Q1429*	KIT D816V
APC R1450*	KRAS G12C
BRAF V600E	KRAS G12D
CTNNB1 T41A	KRAS G12V
EGFR C797S	NRAS Q61R
EGFR E746-A750del	PIK3CA E545K
EGFR L858R	PIK3CA H1047R
EGFR D770_N771insG	PTEN R130G
EGFR T790M	TP53 R175H
FGFR3 S249C	TP53 R248Q
IDH1 R132H	

- **cfDNA Size Control.** This control is for the purpose of monitoring the degree of gDNA contamination in the extracted cfDNA. DNA-depleted/DNA-free plasma is spiked with either high molecular weight gDNA molecules, or 150 bp cfDNA fragments, or both as desired.

Quality Control

1. The quality and purity of genomic DNA were tested by spectrophotometer. $A_{260/280}$ is between 1.8 and 2.0
2. Fragmentation quality is visually examined by electrophoresis. Main band is between 100bp and 200bp. Dimer band is less than 5% of the total.
3. House-keeping gene RNase P or TERT is tested by PCR amplification for Genomic DNA

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