Blood STASIS™ 21-ccfDNA

For collection of whole blood samples and stabilization of ccfDNA

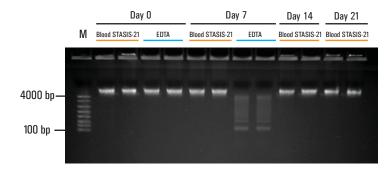
Stabilizes human whole blood and ccfDNA for 21 days at room temperature

The Blood STASIS™ 21-ccfDNA is a plastic, evacuated tube used for collection, anti-coagulation, stabilization, transport and storage of venous whole blood as well as the preservation of circulating, cell-free DNA (ccfDNA).

Effective stabilization of blood cells

Whole blood samples were stabilized in Blood STASIS 21-ccfDNA tubes at room temperature (15-30°C) for 21 days. gDNA and ccfDNA were analyzed.

Stabilization of Blood Cells and Prevention of Apoptosis



Blood STASIS 21-ccfDNA stabilization helps prevent apoptosis of blood cells and degradation of blood genomic DNA. Genomic DNA was extracted using MagBio HighPrep Blood & Tissue Kit from whole blood samples collected in Blood STASIS 21-ccfDNA tube and KaEDTA tube; then incubated for 21 days at room temperature. Extracted gDNA were analyzed using 1.2% agarose

ael electrophoresis.



Blood STASIS21-ccfDNA stabilization helps prevent release of genomic DNA from white blood cells and ensure quality of ccfDNA during 21 days storage at room temperature

RT Storage	Blood STASIS 21-ccfDNA	EDTA
Days	ccfDNA Integrity Index (ALU 247/115)**	
0	0.30	0.32
7	0.28	0.85
14	0.32	0.89
21	0.31	0.91

** Each number represents average of 2 samples

Plasma DNA was extracted from 1mL plasma from healthy control using MagBio cfKapture 21 Kit. Four time points were tested (0, 7, 14 and 21 days). Extracted plasma DNA was analyzed using Qubit and qPCR with Alu gene-specific primer sets (115bp; ALU 115) and long (247 bp, ALU 245) amplicons from genomic ALU repeats.

ccfDNA shows small size distribution around 165bp; ALU 115-qPCR results accurately detect the total quantity of ccfDNA and high molecular weight cellular genomic DNA. Alu247-qPCR results indicate only presence of high molecular weight cellular qDNA contamination. The ratio ALU247/ALU115 is therefore an accurate indication of ccfDNA integrity of the sample- T.B. hao in the British Journal of Cancer (2014) 111, 1482-1489). According to results from Hao and al. ccfDNA integrity indices are as follow:

Samples	DNA integrity index
ccfDNA from healthy control	0.38 (0.29-0.49)
Primary cancer patient ccfDNA	0.62 (0.51-0.65)
gDNA	1

Hao et al. 2014

Ordering Information

For research use only. Not intended for use in diagnostic procedures.

Cat No.	Product	Description
BS21-CF10-100	Blood STASIS 21-ccfDNA 9 mL (100)	100 Tubes: 1 ml Additive, 8 ml blood draw volume
BS21-CF6-100	Blood STASIS 21-ccfDNA 6 mL (100)	100 Tubes: 0.6 ml Additive, 5.4 ml blood draw volume
BS21-CF3-200	Blood STASIS 21-ccfDNA 3 mL (200)	200 Tubes: 0.35 ml Additive, 2.65 ml blood draw volume
CFK-D50-5ML	cfKapture 21 Kit	For 50 preps: Purification of cell-free DNA (cfDNA) from 5 ml STABILIZED plasma



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