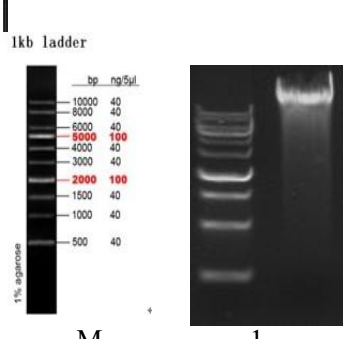


CERTIFICATE OF ANALYSIS

Product information

Name	Panel-Ref® Structural Variation Cocktail I-gDNA
Catalog No.	CBP90033
Lot No.	CGD30027473
Format	Genomic DNA
Buffer	Tris-EDTA
Storage Conditions	4°C
Date of Manufacture	2021/08/12
Expiry	36 months from the date of manufacture

Quality Control

Test Items	Standard	Results	Passed
Quantity	1.00 µg/vial*1 vial	1.00 µg/vial*1 vial	√
Concentration	40.00 ng/uL±10%	40.20 ng/uL by Qubit 3.0 detection	√
OD ₂₆₀ /OD ₂₈₀	1.7~2.1	1.78 by Nanodrop detection	√
DNA electrophoresis	No Degradation	 <p>1kb ladder</p> <p>M: Marker I: Panel-Ref® Structural Variation Cocktail I-gDNA</p>	√

Gene	DNA Change	AA Change	Variant Type	%AF
AKT1	c.49G>A	p.E17K	SNV	5.77%
PIK3CA	c.1624G>A	p.E542K	SNV	5.24%
ERBB2	c.2324_2325ins12	p.A775_G776insYVMA	Insertion	4.26%
EGFR	c.2235_2249del15	p.E746_A750delELREA	Deletion	5.38%
ROS1	N/A	CD74(E6)-ROS1(E34) Fusion	Fusion	4.44%
ALK	N/A	EML4(E13)-ALK(A20) Fusion V1	Fusion	4.63%
MET	N/A	MET Amplification	CNV	CN=4.31
ERBB2	N/A	ERBB2 Amplification	CNV	CN=4.86
NRAS	c.181C>A	p.Q61K	SNV	5.17%

IDH1 c.394C>T p.R132C SNV 5.07%

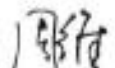
DdPCR Acceptance criteria

Expected value	Acceptance criteria	Expected value	Acceptance criteria
0%	≤0.1%	<5 copies	Expected value ± 30%
<1%	Expected value ± 50%	≥5 and <10 copies	Expected value ± 20%
≥1% and <5%	Expected value ± 30%	≥10 copies	Expected value ± 15%
≥5% and <10%	Expected value ± 20%		
≥10%	Expected value ± 10%		

Caution:

For research use only.

If you have any questions about the Certificate of Analysis, please contact us.

Certified by:  Date:****

 Date:****