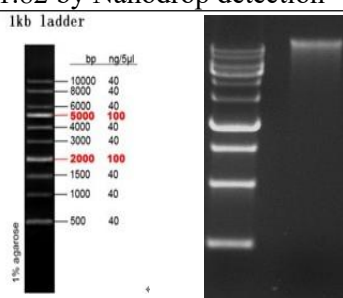


CERTIFICATE OF ANALYSIS

Product information

Name	Panel-Ref® GIST Cancer Reference Standard
Catalog No.	CBP90032
Lot No.	GBD53212388
Format	Genomic DNA
Buffer	Tris-EDTA
Storage Conditions	4°C
Date of Manufacture	2021/08/05
Expiry	36 months from the date of manufacture

Quality Control

Test Items	Standard	Results	Passed
Quantity	0.50 µg/vial*1 vial	0.50 µg/vial*1 vial	√
Concentration	40.00 ng/uL±10%	39.10 ng/uL by Qubit 3.0 detection	√
OD ₂₆₀ /OD ₂₈₀	1.7~2.1	1.82 by Nanodrop detection	√
DNA electrophoresis	No Degradation	 <p>1kb ladder</p> <p>bp ng/5µl</p> <p>10000 40</p> <p>8000 40</p> <p>6000 40</p> <p>4000 40</p> <p>3000 40</p> <p>2000 100</p> <p>1500 40</p> <p>1000 40</p> <p>500 40</p> <p>M</p> <p>1</p> <p>M: Marker</p> <p>1: Panel-Ref® GIST Cancer Reference Standard</p>	√

Gene	AA Change	CDS Change	Expected AF	DdPCR AF(n=2)	Chr position (GRCh37)
c-KIT	p.V560D	c.1679T>A	5.00%	5.13%	chr4:55593613
c-KIT	p.D816V	c.2447A>T	5.00%	4.89%	chr4:55599321
c-KIT	p.A502_Y503dup	c.1504_1509dupGCCTAT	5.00%	4.68%	chr4:55592185_55592186
PDGFRA	p.D842V	c.2525A>T	5.00%	5.22%	chr4:55152093

DdPCR Acceptance criteria

Expected value	Acceptance criteria	Expected value	Acceptance criteria
<1%	Expected value ± 50%	<5 copies	Expected value ± 30%
≥1% and <5%	Expected value ± 30%	≥5 and <10 copies	Expected value ± 20%
≥5% and <10%	Expected value ± 20%	≥10 copies	Expected value ± 10%
≥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:****