

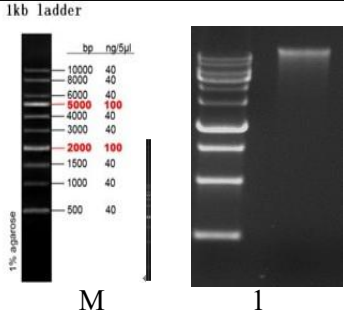
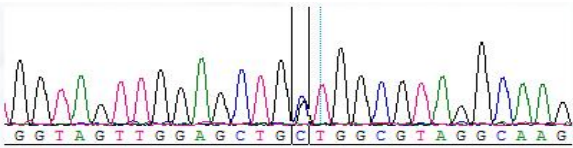
# CERTIFICATE OF ANALYSIS

## KRAS p.G12A Reference Standard

### Product information

Name	KRAS p.G12A Reference Standard
Catalog No.	CBP10296
Lot No.	GBD82664580
Format	Genomic DNA
DNA Change	c.35G>C
AA Change	p.G12A
Mutation Type	Substitution - Missense
Zygoty	Heterozygous
Allelic Frequency	66.67% (update)
Transcript	ENST00000311936
Chr position(GRCh37)	chr12:25398284
Copy Number	3
Ploidy	2.91
Buffer	Tris-EDTA
Storage Conditions	4°C
Date of Manufacture	Jan.-24-2022
Expiry	36 months from the date of manufacture


### Quality Control

Test Items	Standard	Results	Passed
Quantity	1ug/vial*4vials	1ug/vial*4vials	√
Concentration	Qubit 3.0	30 ng/uL±10%	√
OD <sub>260</sub> /OD <sub>280</sub>	1.7~2.0	1.86	√
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 100</p> <p>2000 100</p> <p>1500 40</p> <p>1000 40</p> <p>500 40</p> <p>1% agarose</p> <p>M</p> <p>I</p> <p>M: Marker</p> <p>I: KRAS p.G12A Reference Standard</p>	√
Genotype	Sanger Sequencing	 <p>G G T A G T T G G A G C T G C T G G C G T A G G C A A G</p>	√
%AF	66.67%	67.19% by DdPCR detection	√

**Caution:**

For research use only.

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

Certified by:  Date:\*\*\*\*

 Date:\*\*\*\*