

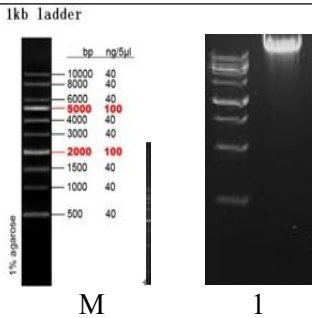
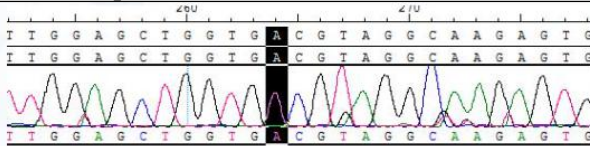
# CERTIFICATE OF ANALYSIS

## KRAS p.G13D Reference Standard

### Product information

Name	KRAS p.G13D Reference Standard
Catalog No.	CBP10298
Lot No.	CGD82541314
Format	Genomic DNA
DNA Change	c.38G>A
AA Change	p.G13D
Mutation Type	Substitution - Missense
Zygosity	Homozygous
Allelic Frequency	100%
Transcript	ENST00000311936
Copy Number	4
Ploidy	3.17
Buffer	Tris-EDTA
Storage Conditions	-20°C
Date of Manufacture	Mar.-21-2019
Expiry	36 months from the date of manufacture

### Quality Control

Test Items	Standard	Results	Passed
Quantity	1ug/vial*13vials	1ug/vial*13vials	√
Concentration	Qubit 3.0	30 ng/uL±10%	√
OD <sub>260</sub> /OD <sub>280</sub>	1.7~2.0	1.81	√
DNA electrophoresis	No Degradation	 <p>1kb ladder</p> <p>bp ng/5ul</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>1% agarose</p> <p>M 1</p> <p>M: Marker</p> <p>1: KRAS p.G13D Reference Standard</p>	√
Genotype	Sanger Sequencing	 <p>T T G G A G C T G G T G A C G T A G G C A A G A G T G</p> <p>T T G G A G C T G G T G A C G T A G G C A A G A G T G</p> <p>T T G G A G C T G G T G A C G T A G G C A A G A G T G</p>	√
%AF	DdPCR	99.99%	√

**Caution:**

For research use only.

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

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

 Date:\*\*\*\*