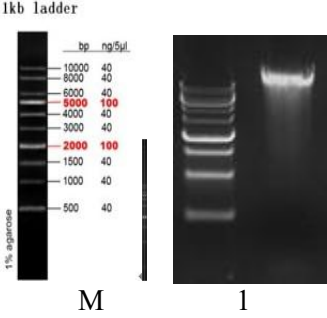
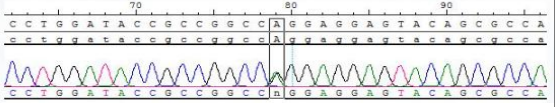


CERTIFICATE OF ANALYSIS

Product information

Name	HRAS p.Q61R Reference Standard
Catalog No.	CBP10285
Lot No.	CBFA22101202
Format	Genomic DNA
DNA Change	c.182A>G
AA Change	p.Q61R
Mutation Type	Substitution - Missense
Zygosity	Heterozygous
%AF	50.00%
Transcript	ENST00000397596
Chr position(GRCh37)	chr11:533874
Copy Number	2
Ploidy	1.95
Buffer	Tris-EDTA
Storage Conditions	-20°C
Date of Manufacture	Oct.-12-2022
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%	38.30 ng/uL by Qubit 3.0 detection	√
OD ₂₆₀ /OD ₂₈₀	1.7~2.1	1.88 by Nanodrop detection	√
DNA electrophoresis	No Degradation	 <p>1kb ladder</p> <p>M: Marker 1: HRAS p.Q61R Reference Standard</p>	√
Genotype	Positive	 <p>By sanger sequencing</p>	√
%AF	50.00%	49.23% 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:****