

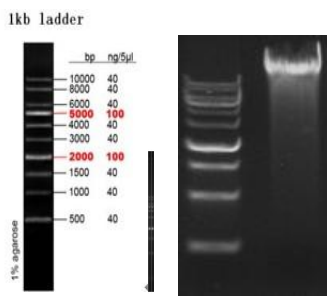
## CERTIFICATE OF ANALYSIS

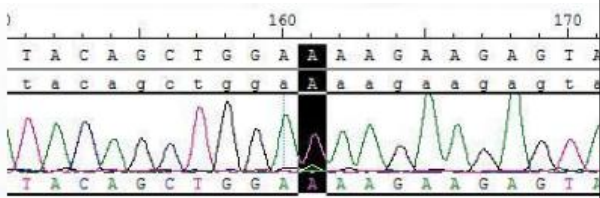
### NRAS p.Q61K Reference Standard

#### Product information

Name	NRAS p.Q61K Reference Standard
Catalog No.	CBP10310
Lot No.	CGD81482914
Format	Genomic DNA
DNA Change	c.181C>A
AA Change	p.Q61K
Mutation Type	Substitution - Missense
Zygosity	Heterozygous
Allelic Frequency	85.71%
Transcript	ENST00000369535
Copy Number	7
Ploidy	3.68
Buffer	Tris-EDTA
Storage Conditions	-20°C
Date of Manufacture	Jun.-27-2019
Expiry	36 months from the date of manufacture

#### Quality Control

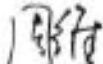
Test Items	Standard	Results	Passed
Quantity	1ug/vial*5vials	1ug/vial*5vials	√
Concentration	Qubit 3.0	40 ng/uL±10%	√
OD <sub>260</sub> /OD <sub>280</sub>	1.7~2.0	1.84	√
DNA electrophoresis	No Degradation	 <p>1kb ladder</p> <p>bp ng/5ul</p> <p>10000 40</p> <p>8000 40</p> <p>6000 40</p> <p>4000 40</p> <p>3000 40</p> <p>2000 100</p> <p>1500 40</p> <p>1000 40</p> <p>500 40</p> <p>M</p> <p>1</p> <p>M: Marker</p> <p>1: NRAS p.Q61K Reference Standard</p>	√

Genotype	Sanger Sequencing		√
%AF	DdPCR	87.2%	√

**Caution:**

For research use only.

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

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

 Date:\*\*\*\*