

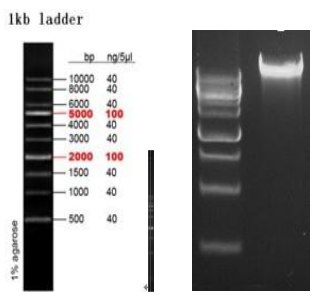
## CERTIFICATE OF ANALYSIS

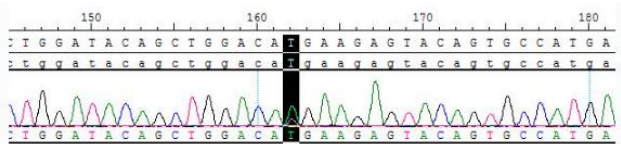
### NRAS p.Q61H Reference Standard

#### Product information

Name	NRAS p.Q61H Reference Standard
Catalog No.	CBP10312
Lot No.	CGD20301379
Format	Genomic DNA
DNA Change	c.183A>T
AA Change	p.Q61H
Mutation Type	Substitution - Missense
Zygoty	Heterozygous
Allelic Frequency	66.67%
Transcript	ENST00000369535
Copy Number	3
Ploidy	2.17
Buffer	Tris-EDTA
Storage Conditions	-20°C
Date of Manufacture	Jun.-21-2019
Expiry	36 months from the date of manufacture

#### Quality Control


Test Items	Standard	Results	Passed
Quantity	1ug/vial*1vial	1ug/vial*1vial	√
Concentration	Qubit 3.0	40 ng/uL±10%	√
OD <sub>260</sub> /OD <sub>280</sub>	1.7~2.0	1.90	√
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>5000 100</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: NRAS p.Q61H Reference Standard</p>	√

Genotype	Sanger Sequencing	
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**Caution:**

For research use only.

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

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

 Date:\*\*\*\*