CERTIFICATE OF ANALYSIS

PRODUCT INFORMATION

Cell Line	NEK1 knockout cell line	**Genotype**	CRISPR / Cas9-edited
Product ID	HZGHC000344c010	**Parental**	HAP1
Date of Manufacture	2015-08-05	**Passage**	7

PROPERTIES

Total Cells	1x10^6
Volume / Ampoule	0.4 ml
Storage Conditions	Liquid Nitrogen vapour phase

QUALITY CONTROL

TEST	TEST METHOD	PASS/FAIL
Viability	Post thawing culture	Pass
Mycoplasma	MYCOPLASMACHECK (GATC Biotech)	Pass
Cell line Characterisation	Sanger Sequencing (DNA)	Pass

GROWTH CONDITIONS

Recommended culture media	Iscove's Modified Dulbecco's Medium (IMDM) supplemented with 10 % FCS, 100 U/ml Penicilin and 100 µg/ml Streptomycin
Subculture	Cells are cultured as a monolayer at 37°C in a humidified atmosphere with 5% CO2. Cells should be passaged every 2-3 days. Split at 70-75% confluency, approximately 1:10-1:15.
Cell line revival	Rapidly thaw cells in a 37°C water bath. Transfer contents into a tube containing pre-warmed media. Centrifuge cells and seed into a 75cm2 flask containing pre-warmed media.
Recommended freezing media	IMDM + 20 % FCS + 10 % DMSO

t +43 1 3400 400 f +43 1 9165522 16 e genomics@horizondiscovery.com w www.horizondiscovery.com
Horizon Genomics GmbH, Campus Vienna Biocenter 3, 1030, Vienna, Austria

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CELL LINE CHARACTERIZATION (DNA)

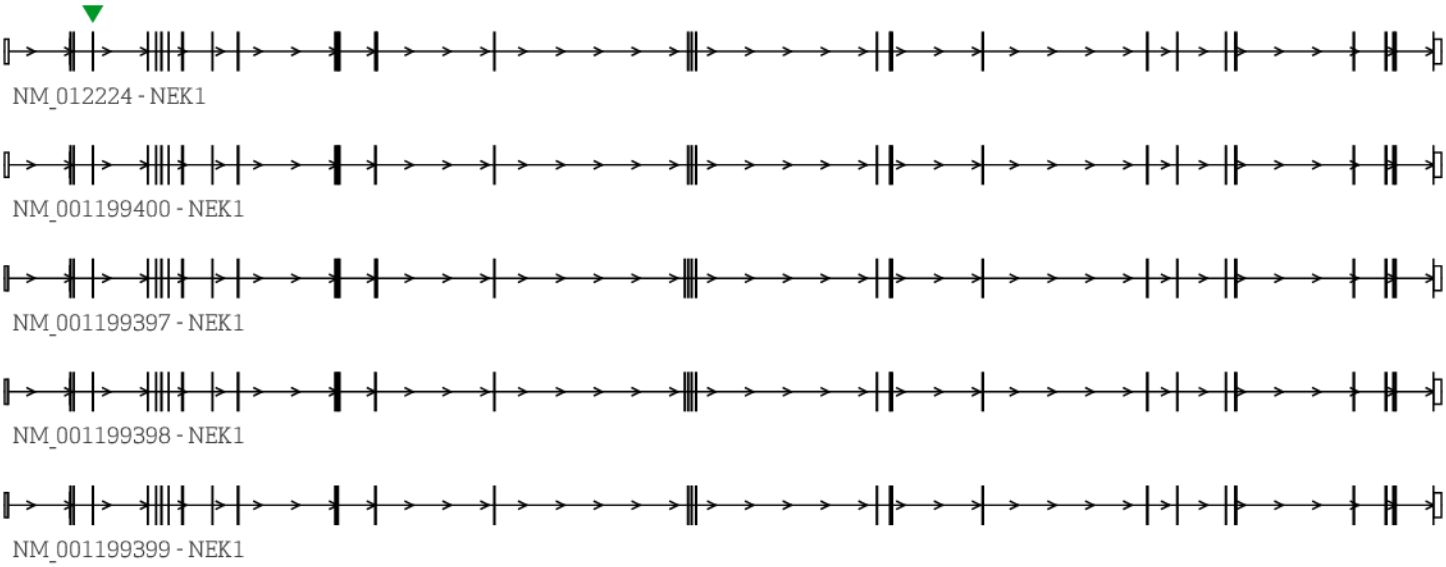
Target Gene	NEK1	**Mutation**	2bp deletion in exon 4
Guide RNA Sequence	ATAGTAATGGATTACTGTGA	**Genomic location**	chr4:169599161
Target Transcript	NM_001199400		
Synonyms	NY-REN-55, SRPS2, SRPS2A		

Forward Primer	Reverse Primer	Sequencing Primer
AAGGTGGCAGCTAATTAGAGGTAAA	GCCCTAATTCTTTTGAGTATGGTCC	GCCCTAATTCTTTTGAGTATGGTCC

Sequencing result

CCTAATNCTTTTGAGTATGGTCCTGTTTTTTGTTCAGCAGCTGCTTTTTAGTAAGCTTTTAAGTACTTTTAATTTAGCCATGCTTTTG
ATGTACGTTTTTAAAAGTGGACTGTAATGTTTATATTTTGTAGAAAATGGCTCTCTCTACATAGTAATGGATTACTGAGGGAGGGGA
TCTGTTTAAGCGAATAAATGCTCAGAAAGGCGTTTTGTTTCAAGAGGATCAGGTAAGTTTGCATTTAGGAAATTGACTCTTACTCTA
TTATTGAGAAGTAGTTCAAAATTTGTTTATGTGTGTATTTGTTTTTAACTACAAATGCTAATCAAAATTACTAGGGAAGTTTAGTATN
NC

Transcript Plot



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Sequence alignment

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CCTAATNCTTTTGAGTATGGTCCTGTTTTTTGTTCAGCAGCTGCTTTTTAGTAAGCTTTTAAGTACTTTTAATTTAGCCATGCTT
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
CCTAATTCTTTTGAGTATGGTCCTGTTTTTTGTTCAGCAGCTGCTTTTTAGTAAGCTTTTAAGTACTTTTAATTTAGCCATGCTT

TTGATGTACGTTTTTAAAAGTGGACTGTAATGTTTATATTTTGTAGAAAATGGCTCTCTCTACATAGTAATGGATTACTG--AGG
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||  |||
TTGATGTACGTTTTTAAAAGTGGACTGTAATGTTTATATTTTGTAGAAAATGGCTCTCTCTACATAGTAATGGATTACTGTGAGG

GAGGGGATCTGTTTAAGCGAATAAATGCTCAGAAAGGCGTTTTGTTTCAAGAGGATCAGGTAAGTTTGCATTTAGGAAATTGACT
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
GAGGGGATCTGTTTAAGCGAATAAATGCTCAGAAAGGCGTTTTGTTTCAAGAGGATCAGGTAAGTTTGCATTTAGGAAATTGACT

CTTACTCTATTATTGAGAAGTAGTTCAAAATTTGTTTATGTGTGTATTTGTTTTTAACTACAAATGCTAATCAAAATTACTAGGG
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
CTTACTCTATTATTGAGAAGTAGTTCAAAATTTGTTTATGTGTGTATTTGTTTTTAACTACAAATGCTAATCAAAATTACTAGGG

AAGTTTAGTATNNC
||||||||||..|
AAGTTTAGTATATC
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REFERENCES

N/A