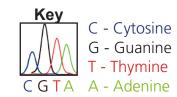
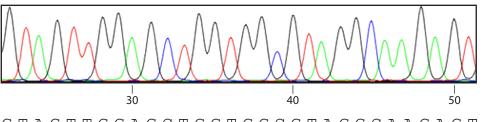


Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.

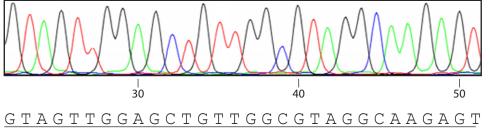


Healthy cell DNA



GTAGTTGGAGCTGGTGGCGTAGGCAAGAGT

Tumour cell DNA

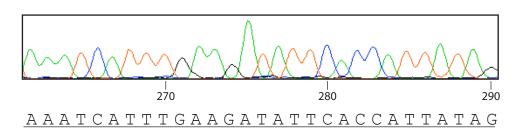


Tumour DNA

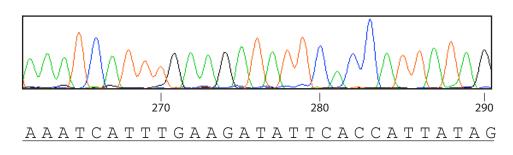
Sequence

Healthy	Tumour
Amino acid	Amino Acid

Healthy cell DNA



Tumour cell DNA



Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid



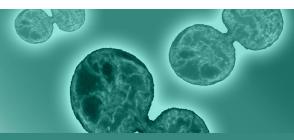


Amino Acid

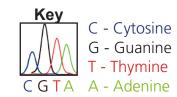
Number

Healthy DNA

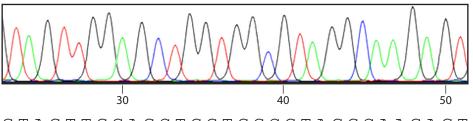
Sequence



Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.

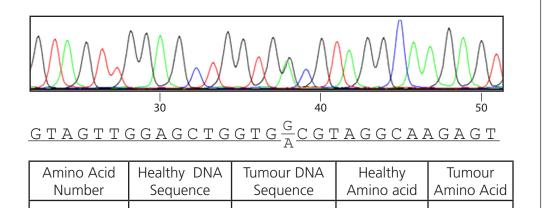


Healthy cell DNA

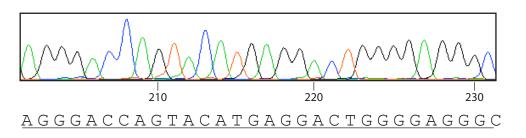


GTAGTTGGAGCTGGTGGCGTAGGCAAGAGT

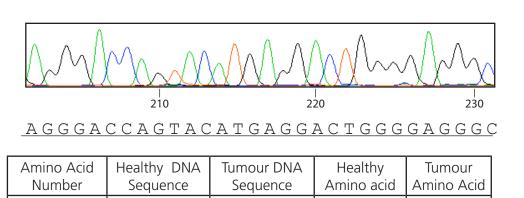
Tumour cell DNA



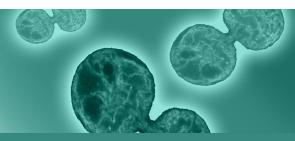
Healthy cell DNA



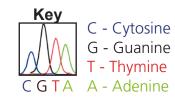
Tumour cell DNA



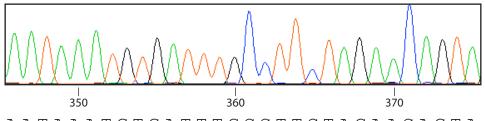




Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.

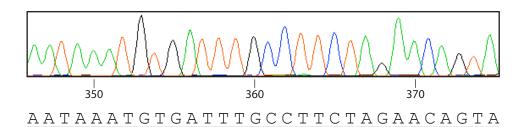


Healthy cell DNA



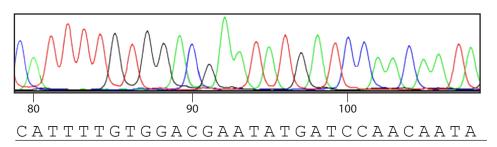
AATAAATGTGATTTGCCTTCTAGAACAGTA

Tumour cell DNA

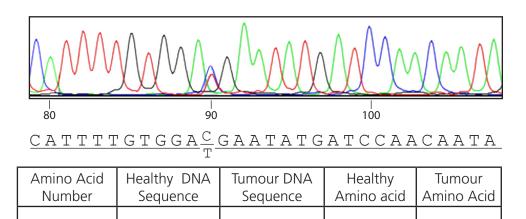


Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Seguence	Seguence	Amino acid	
Number	sequence	sequence	Amino aciu	Amino Acid

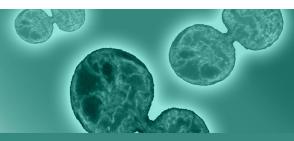
Healthy cell DNA



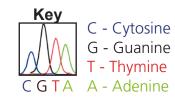
Tumour cell DNA



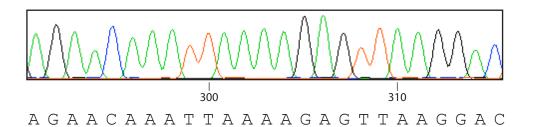




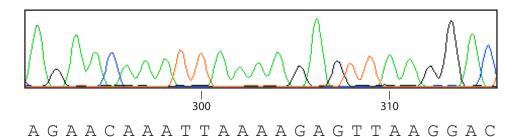
Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.



Healthy cell DNA

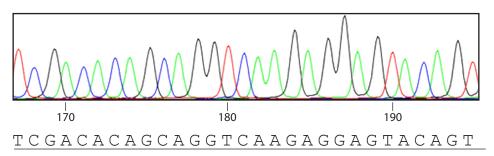


Tumour cell DNA

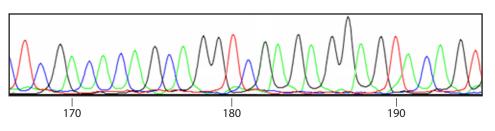


Amino Acid Number	Healthy DNA Sequence	Tumour DNA Seguence	Healthy Amino acid	Tumour
Namber	Sequence	Sequence	Amino acia	Amino Acia

Healthy cell DNA



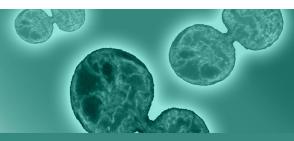
Tumour cell DNA



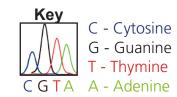
TCGACACAGCAGGTCGAGAGGAGTACAGT

	Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
	Number	Sequence	Sequence	Amino acid	Amino Acid
Ī					

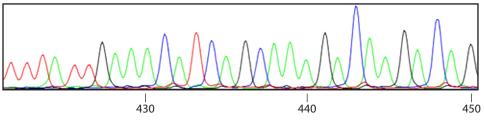




Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.

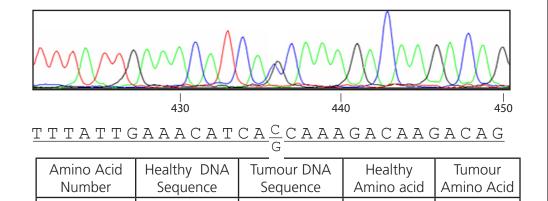


Healthy cell DNA

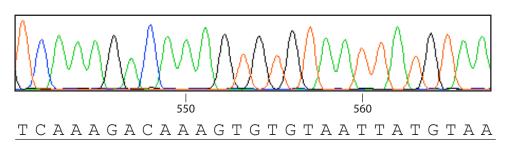


TTTATTGAAACATCAGCAAAGACAAGACAG

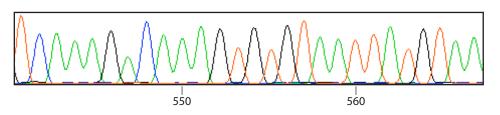
Tumour cell DNA



Healthy cell DNA



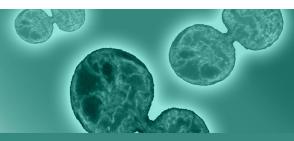
Tumour cell DNA



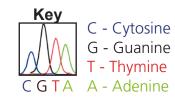
TCAAAGACAAAGTGTGTAATTATGTAA

	Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
	Number	Sequence	Sequence	Amino acid	Amino Acid
Ī					

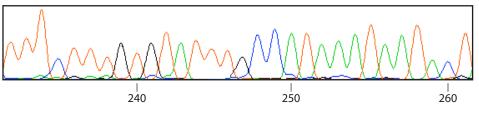




Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.

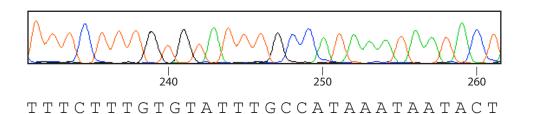


Healthy cell DNA



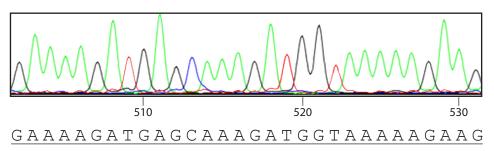
TTTCTTTGTGTATTTGCCATAAATAATACT

Tumour cell DNA

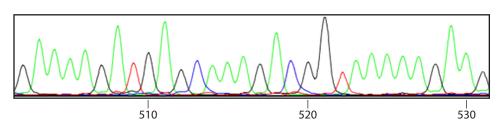


Amino Acid Healthy DNA Tumour DNA Healthy Tumour
Number Sequence Sequence Amino acid Amino Acid

Healthy cell DNA



Tumour cell DNA

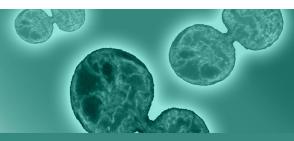


<u>GAAAAGATGAGCAAAGACGGTAAAAAAGAA</u>

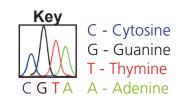
Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid



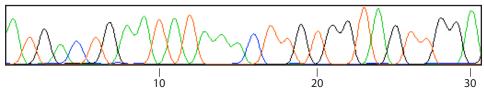




Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.

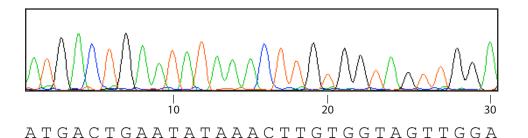


Healthy cell DNA



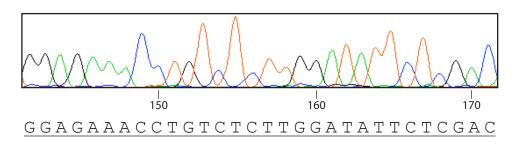
ATGACTGAATATAAACTTGTGGTAGTTGGA

Tumour cell DNA

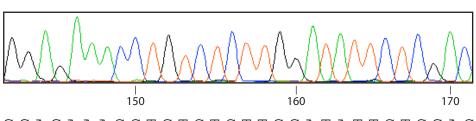


	Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
	Number	Seguence	Seguence	Amino acid	Amino Acid
Ì		'	'		

Healthy cell DNA



Tumour cell DNA

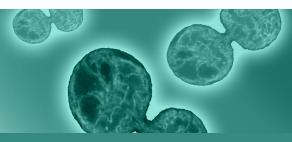


GGAGAAACCTGTCTCTTGGATATTCTCGAC

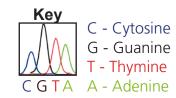
	Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
	Number	Sequence	Sequence	Amino acid	Amino Acid
Ī					



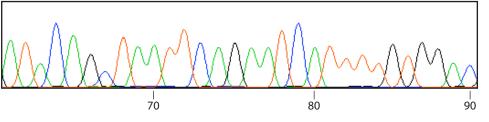




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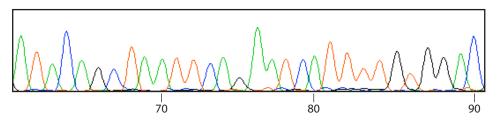


Healthy cell DNA



ATACAGCTAATTCAGAATCATTTTGTGGAC

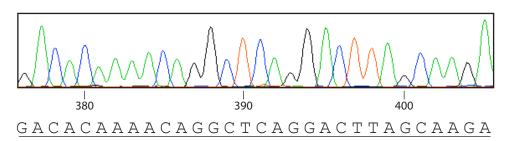
Tumour cell DNA



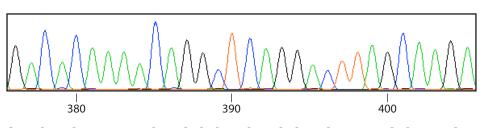
<u>ATACAGCTAATTCAGAATCATTTTGTGGAC</u>

Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid

Healthy cell DNA



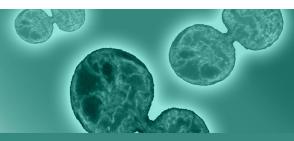
Tumour cell DNA



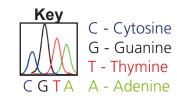
<u>GACACAAAACAGGCTCAGGACTTAGCAAGA</u>

Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid

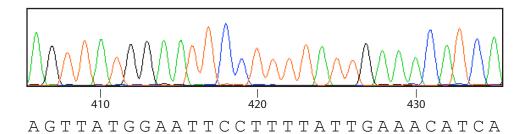




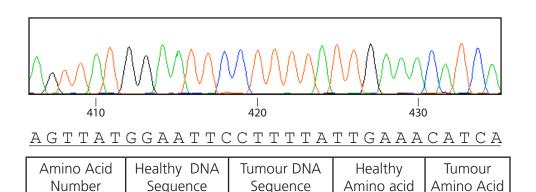
Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.



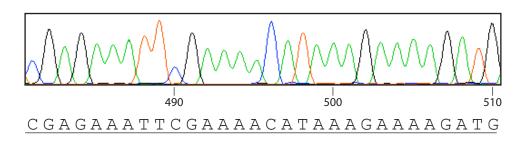
Healthy cell DNA



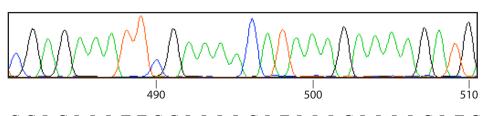
Tumour cell DNA



Healthy cell DNA



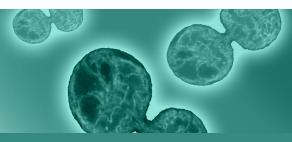
Tumour cell DNA



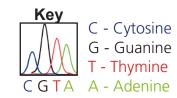
<u>CGAGAAATTCGAAAACATAAAGAAAAGATG</u>

Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid

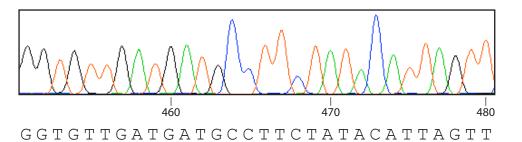




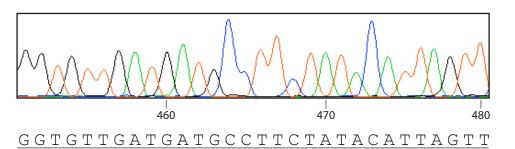
Below are traces of sequenced DNA displaying different regions of the *KRAS* gene. DNA sequence from a healthy cell is shown above that of a tumour cell. Using the key provided, write out the DNA sequence for each trace. Compare the healthy and tumour sequences. If you find a difference, circle the letter(s) that have changed in the sequence and then complete the table below using the banner or gene sheet and the codon wheel provided.



Healthy cell DNA

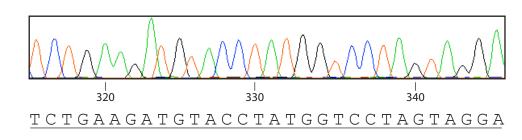


Tumour cell DNA

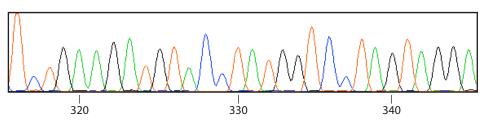


Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid

Healthy cell DNA



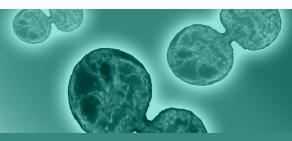
Tumour cell DNA



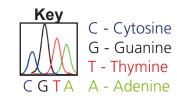
TCTGAAGATGTACCTATGGTCCTAGTAGGA

Amino Acid Number	Healthy DNA Sequence	Tumour DNA Seguence	Healthy Amino acid	Tumour
Number	Sequence	Sequence	Amino aciu	Amino Acid

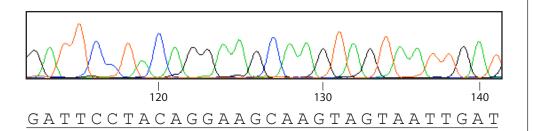




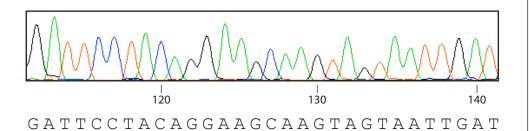
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Healthy cell DNA

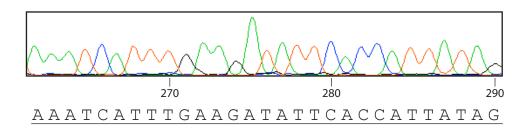


Tumour cell DNA

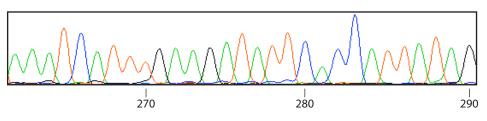


	Amino Acid	Healthy DNA	Tumour DNA	Healthy	Tumour
	Number	Sequence	Sequence	Amino acid	Amino Acid
ľ					

Healthy cell DNA



Tumour cell DNA



AAATCATTTGAAGATATTCACCATTATAG

	Healthy DNA		Healthy	Tumour
Number	Sequence	Sequence	Amino acid	Amino Acid

