

Data Report

For a known sample from *Mus musculus* mRNA for anti-human CD19 monoclonal antibody 4G7 immunoglobulin gamma1 heavy chain (IGHG1 gene)

The whole sequence from NCBI:

```
ctgactctaaccatggaatggagttggatatttctcttctcctgtcaggaactgcaggtgtccactctgaggtccagctgcagcagctggacctgagctgataaagcctggggc
ttcagtgaaagtgtcctgcaaggctctggatacacattcactagctatgttatgcactgggtgaagcagaagcctgggagggccttgagtgattggatataatccttaca
atgatggtactaagtaacaatgagaagtcaaaaggcaaggccacactgactcagacaaatcctccagcacagcctacatggagctcagcagcctgacctctgaggactctgag
gtctattactgtgcaagagggacttattactacggtagtagggatttgactactggggccaaggcaccactctcacagtctcctcagccaaaacgacacccccatctgtctatcca
ctggcccctggatctgtgcccactaactcctatggtagccctgggatgctggcaagggtatttccctgagccagtgcagctgacctggacctctggatccctgtccagcg
gtgtgcacacctcccagctgtcctgcagctgcactctacactctgagcagctcagctgactgtccctccagcactggcccagcgagaccgtcactgcaacggttggccccc
ggccagcagcaccagggtggacaagaaaattgtcccagggattgtggtgtaagccttgcatatgtacagctccagaagatcatctgtcttcttcccccaagcccaag
gatgtgctcaccattactctgactcctaaggctcagctgtgtgtgtagacatcagaaggatgatcccaggtccagctcagctggtttgtagatgatgtggaggtgcacacag
ctcagacgcaacccgggaggagcagttcaacagcacttccgctcagctcagtgaaactcccatcatgcaccaggactggctcaatggcaaggagtcaaatgcagggtcaac
agtgcagcttccctgccccatcgagaaaaccatctccaaaaccaaaggcagaccgaaggctccacaggtgtacacattccacctccaaggagcagatggccaaggata
aagtcagctgacctgcatgataacagacttctcctgaagacattactgtggagtgagcagtggaatgggcagccagcggagaaactacaagaacactcagccatcatggac
acagatggctcttactctgctacagcaagctcaatgtgcagaagagcaactgggagggcaggaatacttccactgctctgtgttacatgagggcctgcacaaccaccatactg
agaagagcctctcccactctctggtgtaaatgatccactgtccttggagccctctggtcctacaggactctgacacctacctcccccctcctgtataaataaagcaccagcact
gccttgggaccctgcaataaaaaaaaaaaaaaaaa
```

VDC-100 Monoclonal Antibody Sequencing Services would provide you the following information:

>DNA level

```
ctgactctaaccatggaatggagttggatatttctcttctcctgtcaggaactgcaggtgtccactctgaggtccagctgcagcagctggacctgagctgataaagcctggggc
ttcagtgaaagtgtcctgcaaggctctggatacacattcactagctatgttatgcactgggtgaagcagaagcctgggagggccttgagtgattggatataatccttaca
atgatggtactaagtaacaatgagaagtcaaaaggcaaggccacactgactcagacaaatcctccagcacagcctacatggagctcagcagcctgacctctgaggactctgag
gtctattactgtgcaagagggacttattactacggtagtagggatttgactactggggccaaggcaccactctcacagtctcctcagccaaaacgacacccccatctgtctatcca
ctggcccctggatctgtgcccactaactcctatggtagccctgggatgctggcaagggtatttccctgagccagtgcagctgacctggacctctggatccctgtccagcg
gtgtgcacacctcccagctgtcctgcagctgcactctacactctgagcagctcagctgactgtcccctccagcactggcccagcgagaccgtcactgcaacggttggccccc
ggccagcagcaccagggtggacaagaaaattgtcccagggattgtggtgtaagccttgcatatgtacagctccagaagatcatctgtcttcttcccccaagcccaag
gatgtgctcaccattactctgactcctaaggctcagctgtgtgtgtagacatcagaaggatgatcccaggtccagctcagctggtttgtagatgatgtggaggtgcacacag
ctcagacgcaacccgggaggagcagttcaacagcacttccgctcagctcagtgaaactcccatcatgcaccaggactggctcaatggcaaggagtcaaatgcagggtcaac
agtgcagcttccctgccccatcgagaaaaccatctccaaaaccaaaggcagaccgaaggctccacaggtgtacacattccacctccaaggagcagatggccaaggata
aagtcagctgacctgcatgataacagacttctcctgaagacattactgtggagtgagcagtggaatgggcagccagcggagaaactacaagaacactcagccatcatggac
acagatggctcttactctgctacagcaagctcaatgtgcagaagagcaactgggagggcaggaatacttccactgctctgtgttacatgagggcctgcacaaccaccatactg
agaagagcctctcccactctctggtgtaaatgatccactgtccttggagccctctggtcctacaggactctgacacctacctcccccctcctgtataaataaagcaccagcact
gccttgggaccctgcaataaaaaaaaaaaaaaaaa
```

>Amino acid level

```
MEWSWIFLFLSGTAGVHS EVQLQQSGPELIKPGASVKMSCKASGYFTSYVMHWKQKPGQGLEWIGYINPYNDGTYNEKFKGK
ATLTSKSSSTAYMELSSLTSEDSAVYYCARGTYYYGSRVFDYWGQGTLLVSSAKTTPPSVYPLAPGSAQNTNSMVTLGCLVKGYFPE
PVTVTWNSGSLSSGVHTFPAVLQSDLYLSSSVTPSSTWPSETVTCNVAHPASSTKVDKIKIVPRDCGCKPCICTVPEVSSVFIFPPKPKD
VLITITLTPKVTCVWVDDISKDDPEVQFSWFVDDVEVHTAQTQPREEQFNSTFRSVSELPIMHQDWLNGKEFKCRVNSAAFPAPIEKTIKST
KGRPKAPQVYTIPIPPKEQMAKDKVSLTCMIDFFPEDITVEWQWNGQPAENYKNTQPIMDTDGYSYFVYSKLVNQKSNWEAGNTFT
CSVLHEGLHNNHTEKLSLHSPGK
```

1-19: leader sequence (signal peptide)

20-140: variable domain

141-464: constant domain

For a known sample from *Mus musculus* mRNA for anti-human CD19 monoclonal antibody 4G7 immunoglobulin kappa light chain (IGK gene)

The whole sequence from NCBI:

```
cttttgtatcaagttctcagaatgaggtgcctagctgagttcctggggctgcttgctgctggtacccctggagccattggggatattgtgatgactcaggctgcaccctctatacct
gtcactcctggagagtcagatccatctcctgcagggtctagtaagagtcctctgaatagtaatggcaacacttactgtattggttctgcagaggccaggccagtctcctcagctc
ctgatatacggatgtccaacctgcctcaggagctccagacaggttcagtgccagtgggcaggaactgctttcacactgagaatcagtagagtgagggtgaggatgtgg
gtgtttactgtatgcaacatctagaatccggttcacgttcggtgctgggaccaagctggagctgaaacgggctgatgctgcaccaactgtatccatctcccaccatccagtg
agcagttaacatctggaggtgcctcagtcgtgtgcttctgaacaactctaccccaaagacatcaatgtcaagtgaagattgatggcagtgaaacgacaaaaatggcgtcctgaa
cagttggactgatcaggacagaaagacagcacctacagcatgagcagcacctcacgttgaccaaggacagatgaacgacataacagctatacctgtgaggccactcac
aagacatcaactcaccattgtcaagagcttcaacaggaatgagtgtagagacaaaggtcctgagacgccaccaccagctccccagctccatctatctcccttaaggctt
ggaggcttccccacaagcgacctaccactgttcggtgctcacaacctctccccacctctctcctcctcccttcttggtttatcatgctaatttgcagaaaaattcaat
aaagtgagtcttgcactgaaaaaaa
```

VDC-100 Monoclonal Antibody Sequencing Services would provide you the following information:

>DNA level

```
cttttgtatcaagttctcagaatgaggtgcctagctgagttcctggggctgcttgctgctggtacccctggagccattggggatattgtgatgactcaggctgcaccctctatacct
gtcactcctggagagtcagatccatctcctgcagggtctagtaagagtcctctgaatagtaatggcaacacttactgtattggttctgcagaggccaggccagtctcctcagctc
ctgatatacggatgtccaacctgcctcaggagctccagacaggttcagtgccagtgggcaggaactgctttcacactgagaatcagtagagtgagggtgaggatgtgg
gtgtttactgtatgcaacatctagaatccggttcacgttcggtgctgggaccaagctggagctgaaacgggctgatgctgcaccaactgtatccatctcccaccatccagtg
agcagttaacatctggaggtgcctcagtcgtgtgcttctgaacaactctaccccaaagacatcaatgtcaagtgaagattgatggcagtgaaacgacaaaaatggcgtcctgaa
cagttggactgatcaggacagaaagacagcacctacagcatgagcagcacctcacgttgaccaaggacagatgaacgacataacagctatacctgtgaggccactcac
aagacatcaactcaccattgtcaagagcttcaacaggaatgagtgtagagacaaaggtcctgagacgccaccaccagctccccagctccatctatctcccttaaggctt
ggaggcttccccacaagcgacctaccactgttcggtgctcacaacctctccccacctctctcctcctcccttcttggtttatcatgctaatttgcagaaaaattcaat
aaagtgagtcttgcactgaaaaaaa
```

>Amino acid level

```
MRCLAFLGLLVLWIPGAIGDIVMTQAAPSIPVTPGESVVISCRSSKLLNSNGNTLYWFLQRPQSPQLLIYRMSNLAGVPDFSGS
GSGTAFTLRISRVEAEDVGVYCMQHLEYPFTFGAGTKLELKRADAAPTVSIFPPSSEQLTSGGASWVCFLLNFYPKDINVKWKIDGSR
QNGVLNSWTDQDSKDYMSSTLTLTKDEYERHNSYTCEATHKTSTSPIVKSFNREK
```

1-20: leader sequence (signal peptide)

21-132: variable domain

133-239: constant domain