NCAP_SARS2

0e79dac1−5600−487d−b4b9−5c7a5c9999db|123 NC

NCAP_SARS2

2508ba22−e0f0−4f86−837f−728927b123c5|209 NC

NCAP_SARS2

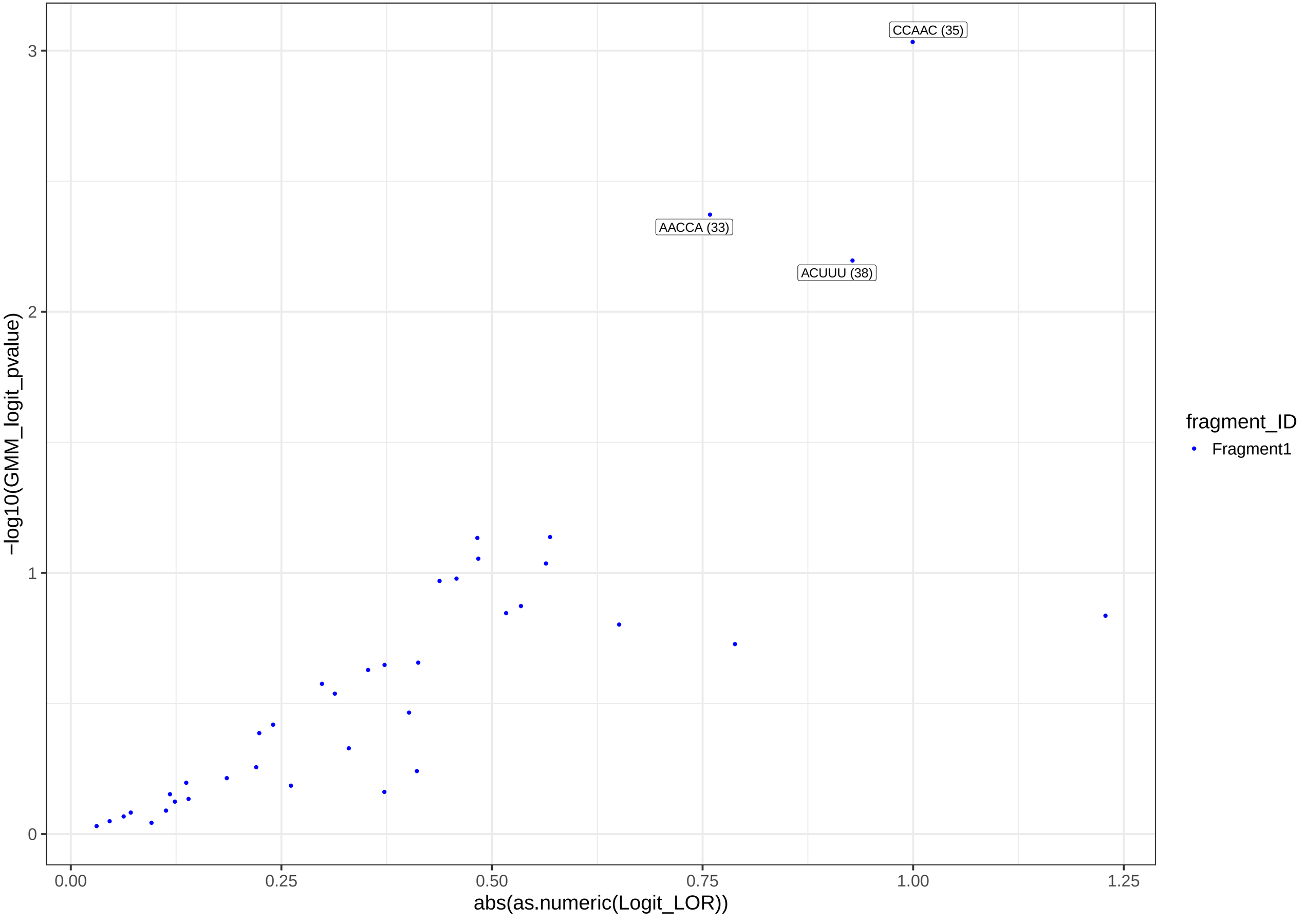
31f63690−13b9−4e8e−bca5−6a5019782682|1194 NC

SPIKE_SARS2

3f2f5640−da4a−4237−952f−cd4a41e84234|315 C

VME1_SARS2

4167c2ea−24da−4951−a5e2−58927d55509a|143 C



NCAP_SARS2

43380068−c713−4bd8−881a−d124d54688fd|227 C

AUCUC (45)

−log10(GMM_logit_pvalue)

4

3

2

1

0

0.0

0.5

1.0

1.5

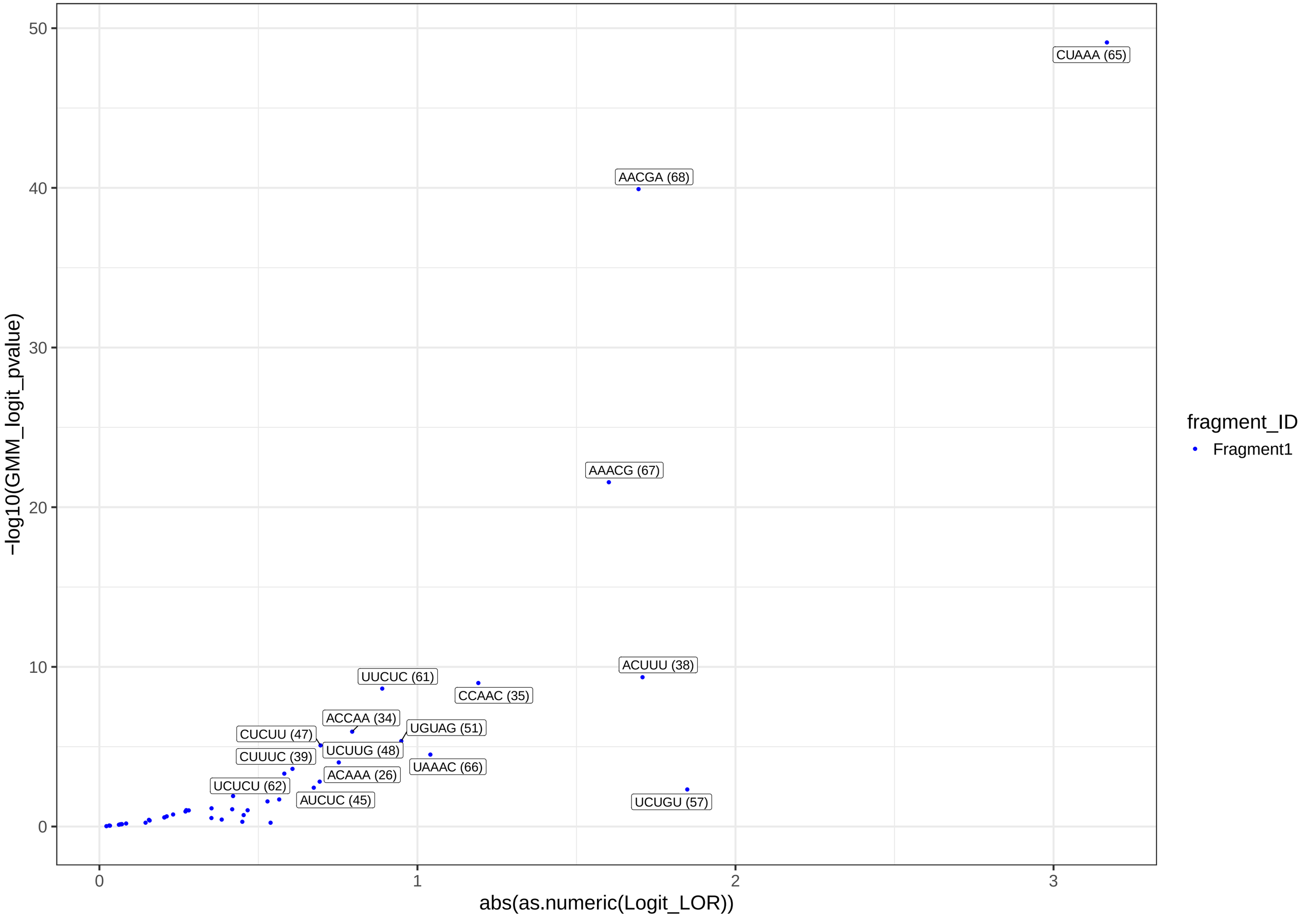
abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

NS6_SARS2

5820681b−6191−45dd−959c−96a8097aafdd|2255 C



NCAP_SARS2

61a628be−eac5−4042−9c08−9674a992a139|1817 C

CCAAC (35)

CUCUU (47)

UAGAU (53)

ACUUU (38)

AUCUC (45)

ACAAA (26)

ACCAA (30)

UUCCC (16)

UCGAU (42)

10

5

0

−log10(GMM_logit_pvalue)

0.0

0.5

1.0

1.5

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

NS7A_SARS2

80d2b168−232a−4773−b01e−769f6dc24857|13267 C

−log10(GMM_logit_pvalue)

12

9

6

3

0

CCAAC (35)

CUCUU (47)

ACAAA (26)

UUCUC (61)

UCGAU (42)

UACCU (12)

ACUUU (38)

UUCCC (16)

CCAAC (31)

0.0

0.5

1.0

1.5

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

VEMP_SARS2

a142ee65−6aca−4eef−b6f0−30e884517173|916 C

AAACG (67)

AACGA (68)

UCUUG (48)

−log10(GMM_logit_pvalue)

12.5

10.0

7.5

5.0

2.5

0.0

0

1

2

3

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

NCAP_SARS2

a9eb4b74−941b−40f2−80c0−93d63e0e7d8e|927 NC

VME1_SARS2

ade569a0−3419−462e−b6c5−77d6f75a8ed5|263 C

AAACG (67)

UCUAA (64)

CGAAC (70)

ACGAA (69)

UAUAU (75)

UAAAC (66)

UUCUC (61)

UGUAG (51)

ACUUU (38)

CCAAC (35)

AACUA (72)

UACCU (12)

UAGAU (53)

GAACU (71)

75

50

25

0

−log10(GMM_logit_pvalue)

0

1

2

3

4

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

NCAP_SARS2

b1b33a2b−f576−4824−892e−def4cff7aa6f|86333 C

CUCUU (47)

CCAAC (35)

UAGAU (53)

UUCUC (61)

AACCA (33)

UGUAG (51)

ACUUU (38)

AGAUC (54)

UCUUG (48)

UGUUC (59)

ACAAA (26)

10.0

7.5

5.0

2.5

0.0

−log10(GMM_logit_pvalue)

0.0

0.3

0.6

0.9

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

ORF9B_SARS2

b1df799c−0edb−4d03−9153−55254feb2f8f|248 NC

UACCU (12)

UUCCC (16)

AUCUC (45)

UUCUC (61)

CCAAC (35)

ACAAA (26)

ACUUU (38)

AACCA (33)

CAAAC (27)

−log10(GMM_logit_pvalue)

4

3

2

1

0

0.0

0.5

1.0

1.5

2.0

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

NS8_SARS2

bd49f404−9323−4537−9590−eafa3b7fb46f|3539 C

UCUUG (48)

UUCUC (61)

CUCUU (47)

CCAAC (35)

UCUCU (46)

AUCUC (45)

UCGAU (42)

AGAUC (54)

AACCA (33)

AUCUG (56)

UCUAA (64)

6

4

2

0

−log10(GMM_logit_pvalue)

0.0

0.5

1.0

1.5

2.0

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

NS6_SARS2

ceb5fff7−3e34−497f−8ad6−411072fffaaa|446 NC

ORF9D_SARS2

de81ef19−655d−4ced−a9cc−cb8384001058|107 C

AUCUC (45)
CUCUU (47)
CUGUU (58)
UCUUG (48)
UCUGU (57)
CCAAC (35)
GAUCU (55)
UUUCG (40)
AACCA (33)
UAGAU (53)

−log10(GMM_logit_pvalue)

8
6
4
2
0

0
1
2
3
4

abs(as.numeric(Logit_LOR))

fragment_ID
Fragment1

NCAP_SARS2

e5be99c8−cb56−4146−b71a−fd092c5091ef|121 NC

AP3A_SARS2

e94116d8−72eb−4252−819c−ad06fd9870d4|4145 C

CUCUU (47)

CUUGU (49)

CUUUC (39)

ACUUU (38)

UUGUA (50)

CCAAC (35)

−log10(GMM_logit_pvalue)

20

15

10

5

0

0.0

0.5

1.0

1.5

2.0

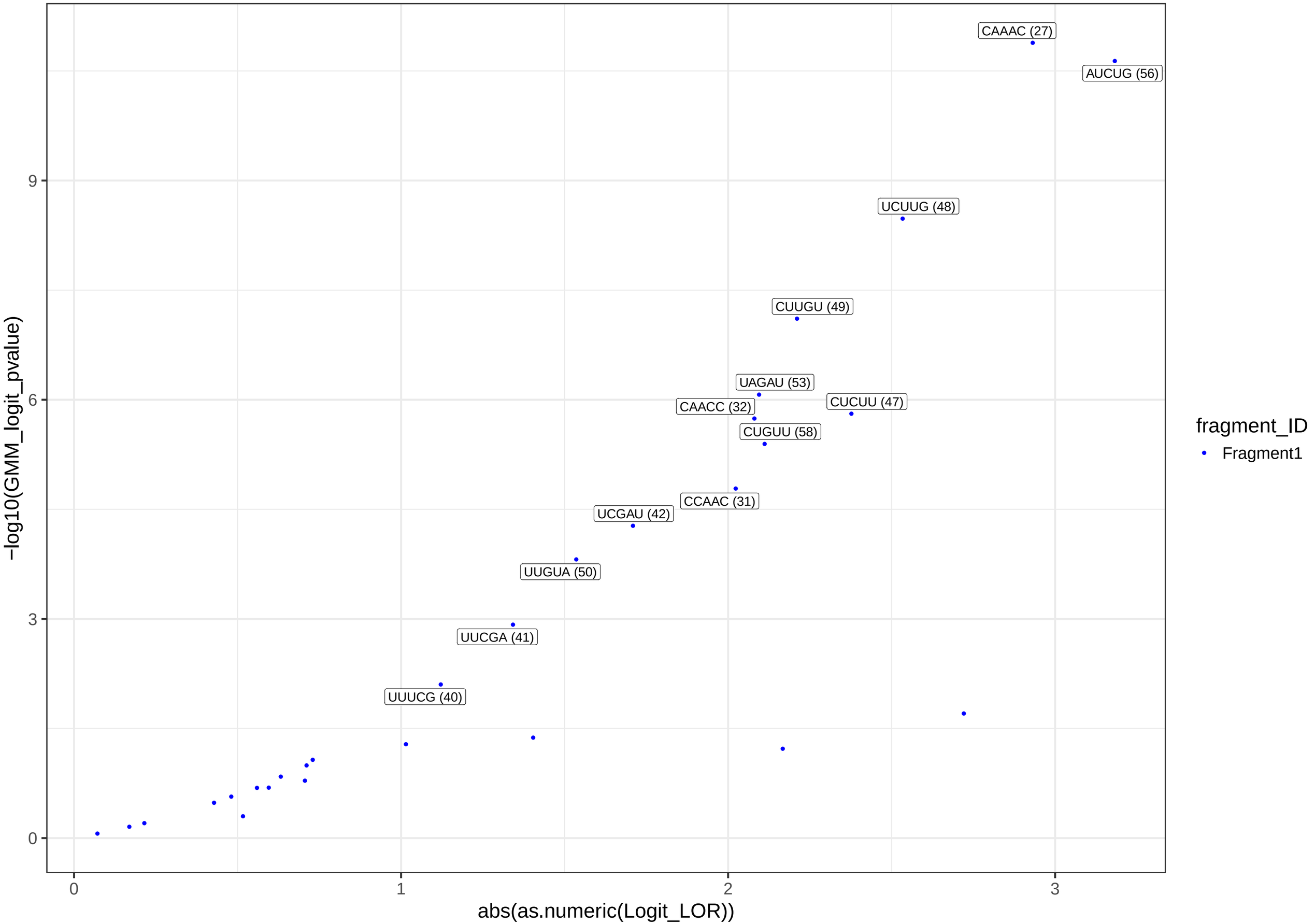
abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1

ORF10_SARS2

efad7b96−ac2e−4ce1−9b83−863ffdb18eac|116 C



VME1_SARS2

fc4d6218−3c79−466d−84e4−705bee2dacef|13813 C

UUCUC (61)

UCUAA (64)

UAAAC (66)

CCAAC (31)

CCAAC (35)

UUCCC (16)

ACUUU (38)

UGUUC (59)

CCCAG (18)

10.0

7.5

5.0

2.5

0.0

−log10(GMM_logit_pvalue)

0.0

0.5

1.0

abs(as.numeric(Logit_LOR))

fragment_ID

Fragment1