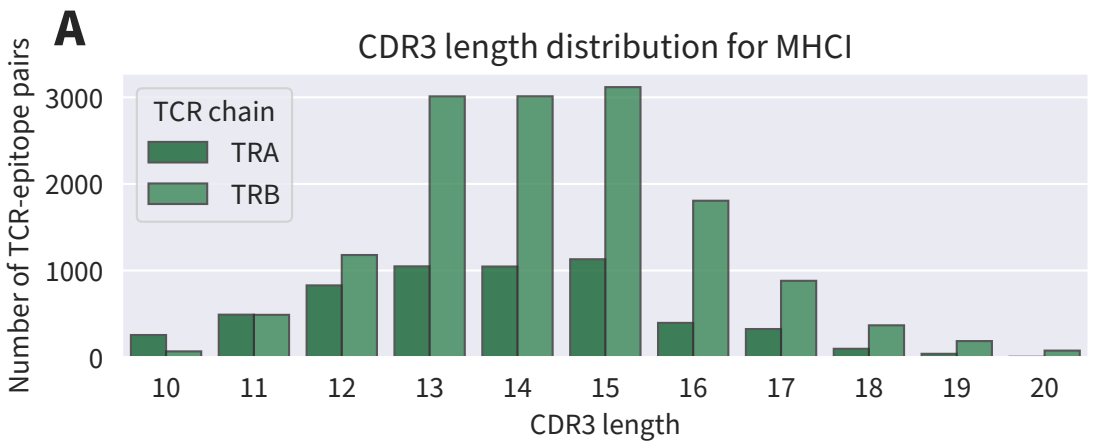
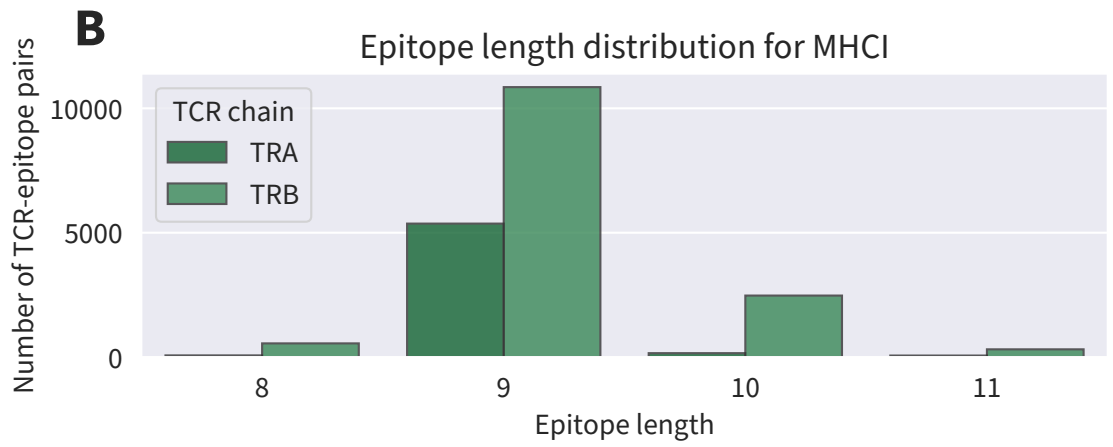
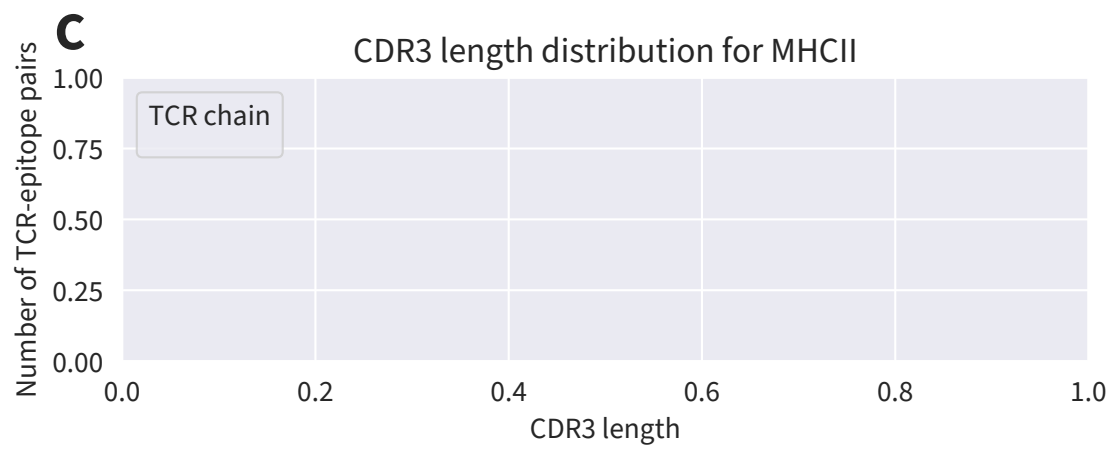
A


CDR3 length distribution for MHCI
Number of TCR-epitope pairs
0
1000
2000
3000
TCR chain
TRA
TRB
10
11
12
13
14
15
16
17
18
19
20
CDR3 length

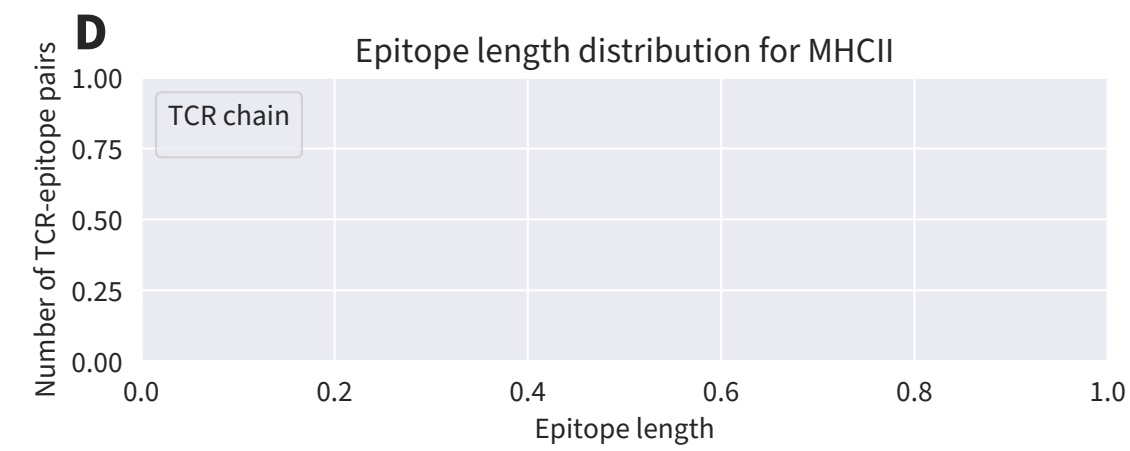
B


Epitope length distribution for MHCI
Number of TCR-epitope pairs
0
5000
10000
TCR chain
TRA
TRB
8
9
10
11
Epitope length

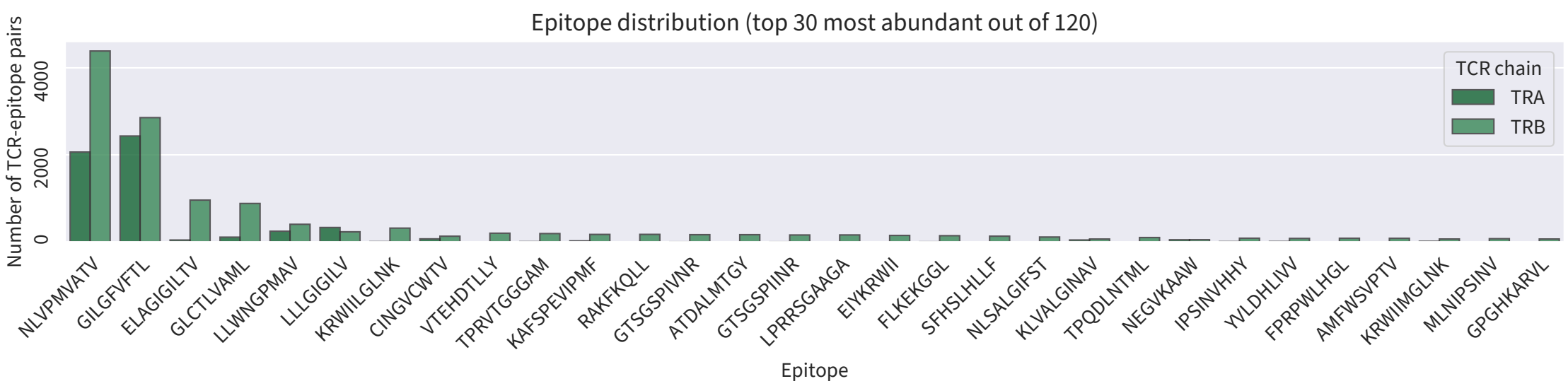
C


CDR3 length distribution for MHCII
Number of TCR-epitope pairs
0.00
0.25
0.50
0.75
1.00
TCR chain
0.0
0.2
0.4
0.6
0.8
1.0
CDR3 length

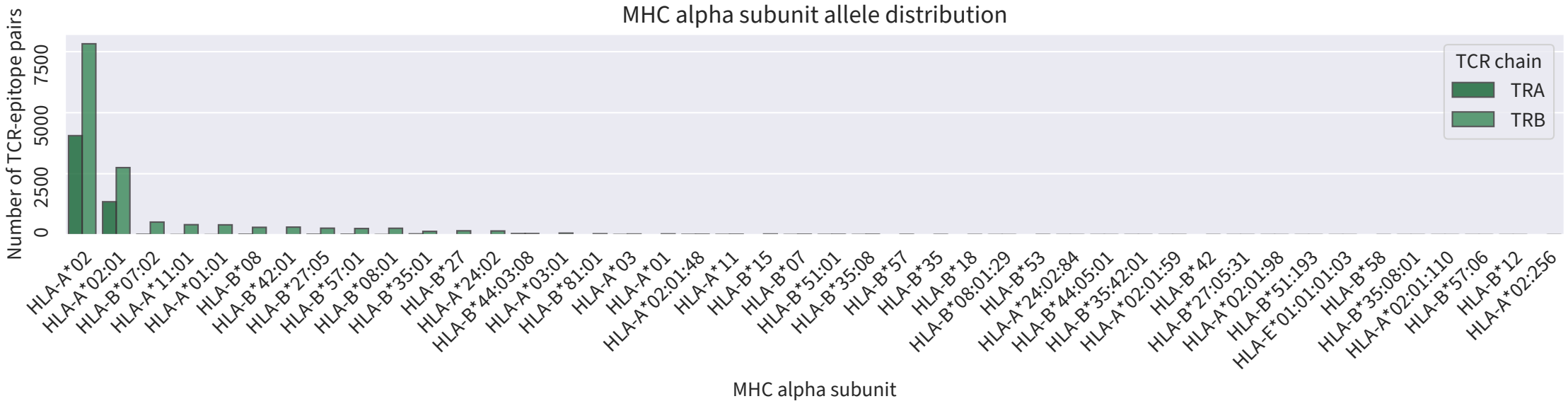
D


Epitope length distribution for MHCII
Number of TCR-epitope pairs
0.00
0.25
0.50
0.75
1.00
TCR chain
0.0
0.2
0.4
0.6
0.8
1.0
Epitope length

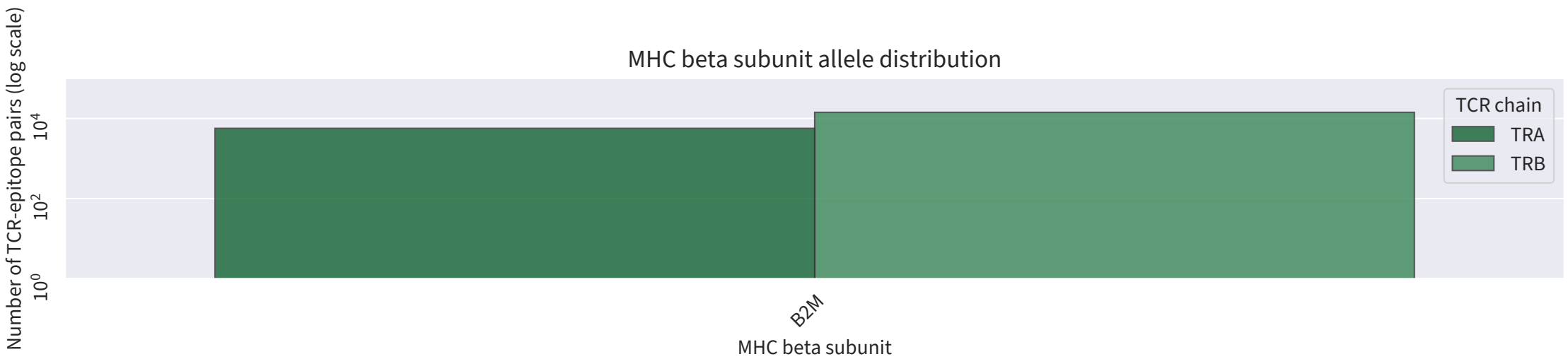
E


Epitope distribution (top 30 most abundant out of 120)
Number of TCR-epitope pairs
0
2000
4000
TCR chain
TRA
TRB
NLVPMVATV
GILGFVFTL
ELAGIGILTV
GLCTLVAML
LLWNGPMAV
LLLGIGILV
KRWIILGLNK
CINGVCWTV
VTEHDTLLY
TPRVTGGGAM
KAFSPEVIPMF
RAKFKQLL
GTSGSPIVNR
ATDALMTGY
GTSGSPIINR
LPRRSGAAGA
EIYKRWII
FLKEKGGL
SFHSLHLLF
NLSALGIFST
KLVALGINAV
TPQDLNTML
NEGVKAAW
IPSINVHHY
YVLDHLIVV
FPRPWLHGL
AMFWSVPTV
KRWIIMGLNK
MLNIPSINV
GPGHKARVL
Epitope

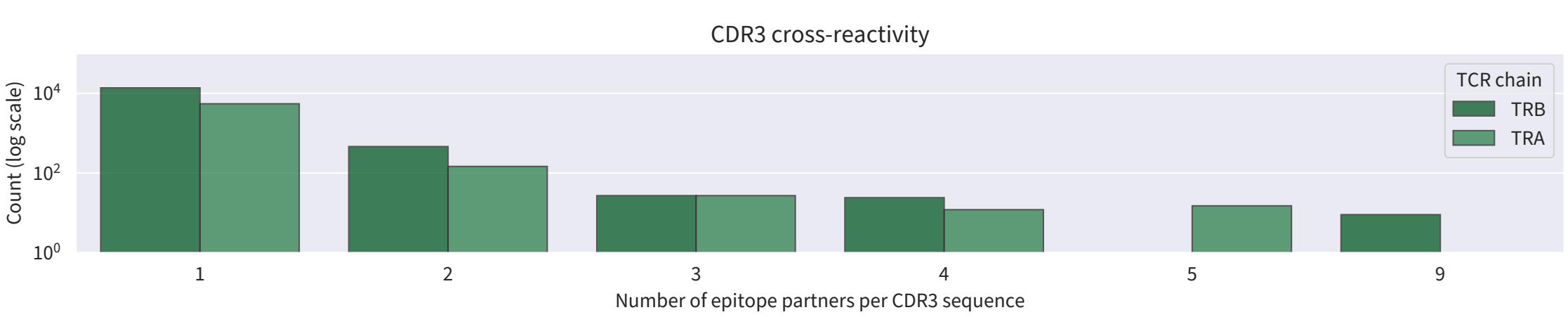
F


MHC alpha subunit allele distribution
Number of TCR-epitope pairs
0
2500
5000
7500
TCR chain
TRA
TRB
HLA-A*02
HLA-A*02:01
HLA-B*07:02
HLA-A*11:01
HLA-A*01:01
HLA-B*08
HLA-B*42:01
HLA-B*27:05
HLA-B*57:01
HLA-B*08:01
HLA-B*35:01
HLA-B*27
HLA-A*24:02
HLA-B*44:03:08
HLA-A*03:01
HLA-B*81:01
HLA-A*03
HLA-A*01
HLA-A*02:01:48
HLA-A*11
HLA-B*15
HLA-B*07
HLA-B*51:01
HLA-B*35:08
HLA-B*57
HLA-B*35
HLA-B*18
HLA-B*08:01:29
HLA-B*53
HLA-A*24:02:84
HLA-B*44:05:01
HLA-B*35:42:01
HLA-A*02:01:59
HLA-B*42
HLA-B*27:05:31
HLA-A*02:01:98
HLA-B*51:193
HLA-E*01:01:01:03
HLA-B*58
HLA-B*35:08:01
HLA-A*02:01:110
HLA-B*57:06
HLA-B*12
HLA-A*02:256
MHC alpha subunit

G


MHC beta subunit allele distribution
Number of TCR-epitope pairs (log scale)
10^0
10^2
10^4
TCR chain
TRA
TRB
B2M
MHC beta subunit

H


CDR3 cross-reactivity
Count (log scale)
10^0
10^2
10^4
TCR chain
TRB
TRA
1
2
3
4
5
9
Number of epitope partners per CDR3 sequence