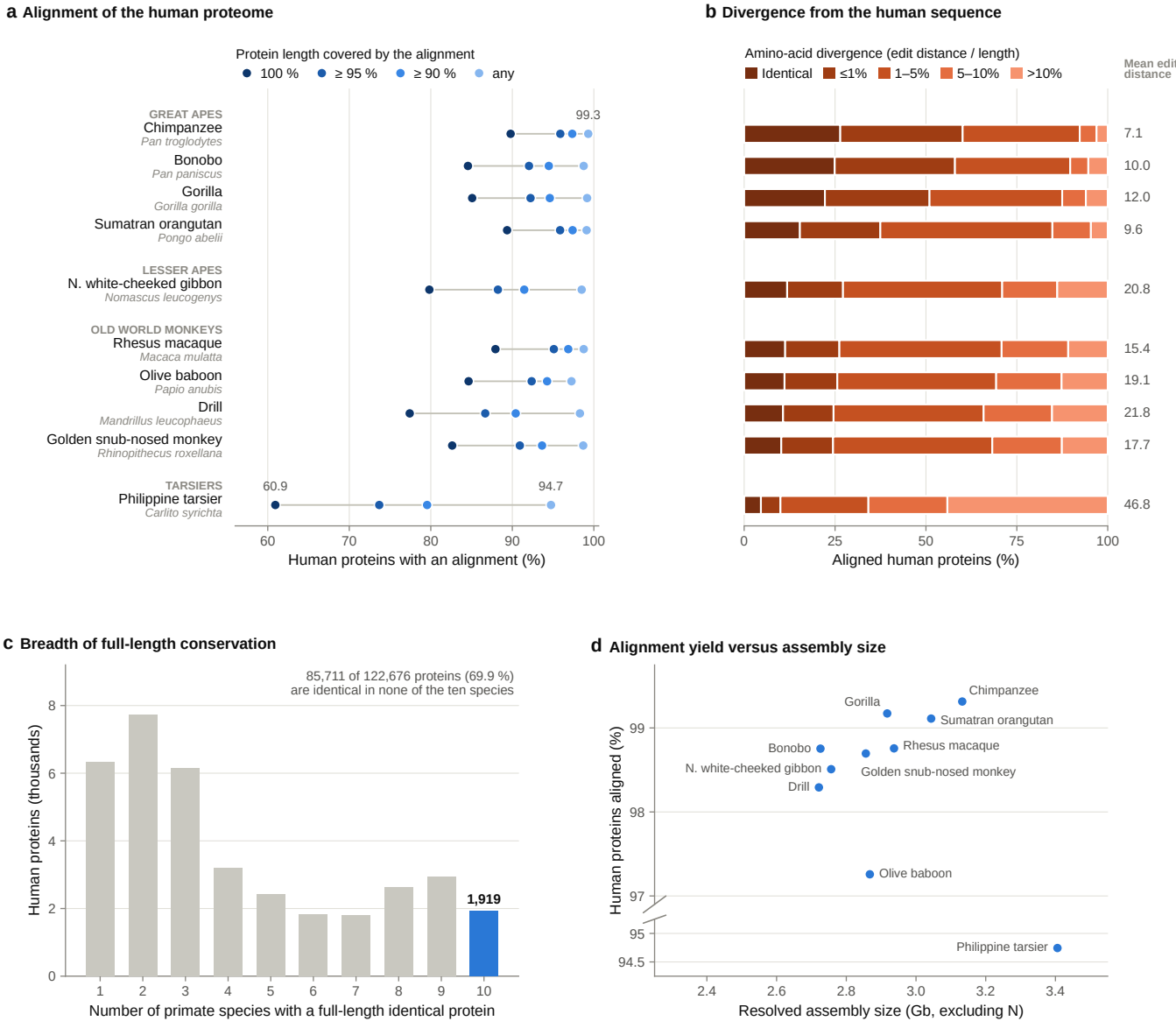
a Alignment of the human proteome
Protein length covered by the alignment
100 %
≥ 95 %
≥ 90 %
any
GREAT APES
Chimpanzee
Pan troglodytes
Bonobo
Pan paniscus
Gorilla
Gorilla gorilla
Sumatran orangutan
Pongo abelii
LESSER APES
N. white-cheeked gibbon
Nomascus leucogenys
OLD WORLD MONKEYS
Rhesus macaque
Macaca mulatta
Olive baboon
Papio anubis
Drill
Mandrillus leucophaeus
Golden snub-nosed monkey
Rhinopithecus roxellana
TARSIERS
Philippine tarsier
Carlito syrichta
99.3
60.9
94.7
60
70
80
90
100
Human proteins with an alignment (%)
b Divergence from the human sequence
Amino-acid divergence (edit distance / length)
Identical
≤1%
1–5%
5–10%
>10%
Mean edit distance
7.1
10.0
12.0
9.6
20.8
15.4
19.1
21.8
17.7
46.8
0
25
50
75
100
Aligned human proteins (%)
c Breadth of full-length conservation
85,711 of 122,676 proteins (69.9 %)
are identical in none of the ten species
Human proteins (thousands)
0
2
4
6
8
1,919
1
2
3
4
5
6
7
8
9
10
Number of primate species with a full-length identical protein
d Alignment yield versus assembly size
Human proteins aligned (%)
94.5
95
97
98
99
Chimpanzee
Gorilla
Sumatran orangutan
Bonobo
Rhesus macaque
N. white-cheeked gibbon
Golden snub-nosed monkey
Drill
Olive baboon
Philippine tarsier
2.4
2.6
2.8
3.0
3.2
3.4
Resolved assembly size (Gb, excluding N)