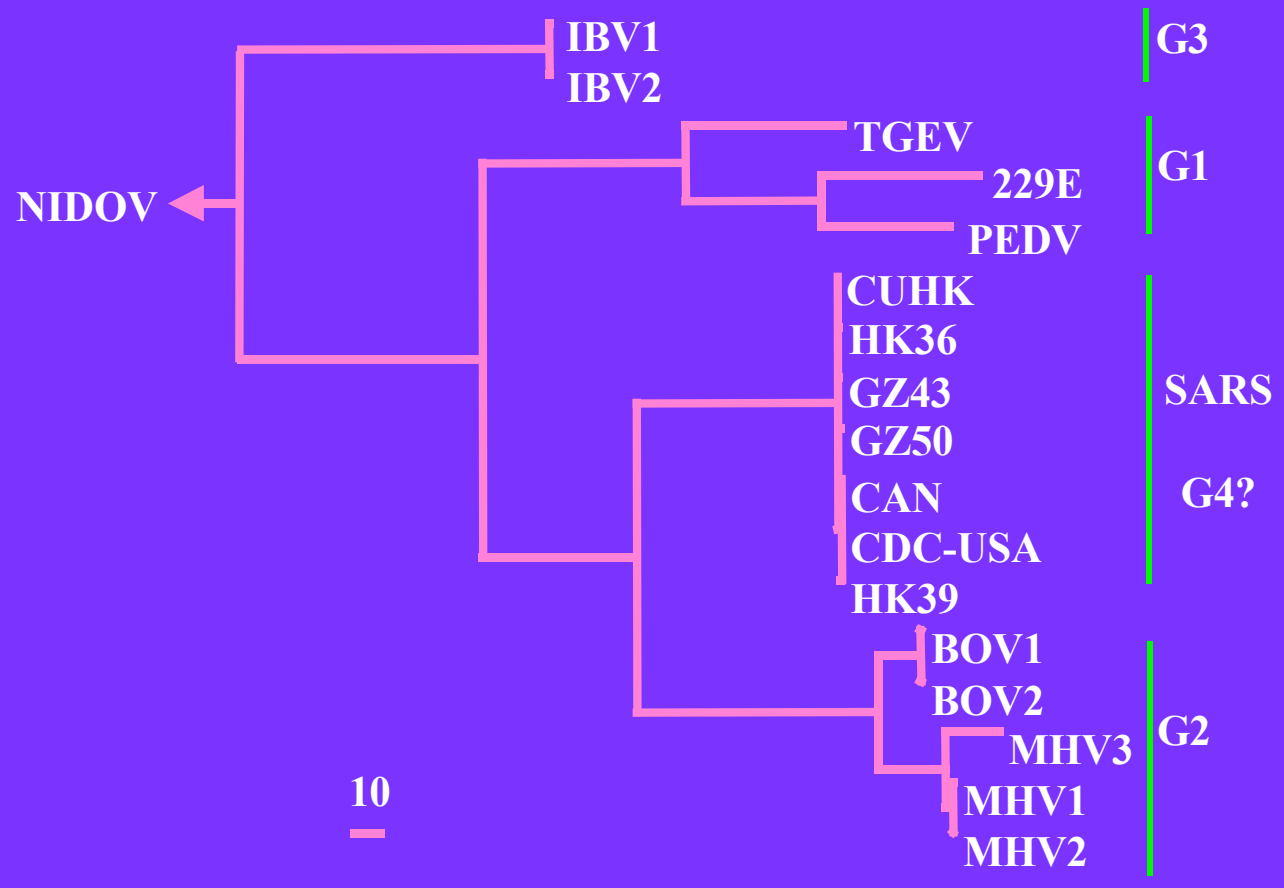
A SARS-like coronavirus found in animals: the precursor of SARS virus?

The University of Hong Kong
Shenzhen CDC

Shaoguan
Heyuan
2 (11)
Shantou
Guangzhou
4 (226)
Foshan
1 (19)
Zhongshan
3 (28)
Jiangmen
6 (15)
Shenzhen
5 (6)
Zhuhai
Zhanjiang


IBV1
IBV2
G3
TGEV
229E
PEDV
G1
NIDOV
CUHK
HK36
GZ43
GZ50
CAN
CDC-USA
HK39
SARS
G4?
BOV1
BOV2
MHV3
MHV1
MHV2
G2
10

Shaoguan
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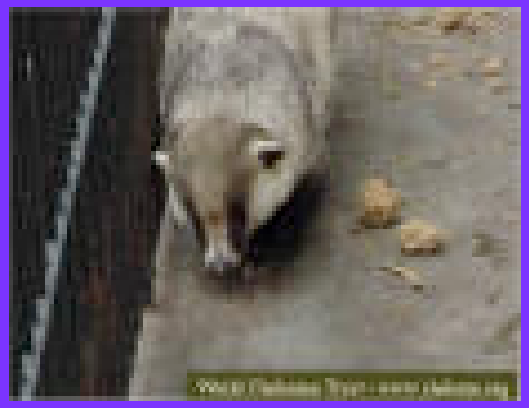
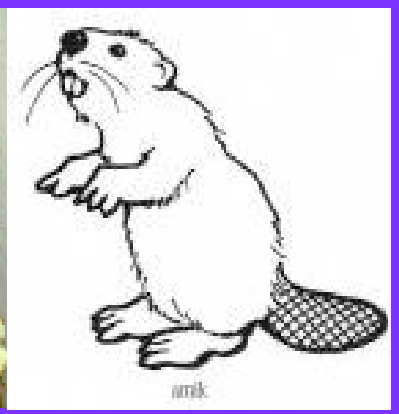
Sampling

Sampling

May 7, 03

Sampling




amik

HPC, Himalayan palm civet (Paguma larvata); HB, Hog-bac

Himalayan palm civet

6, PCR 4+
isolation 4

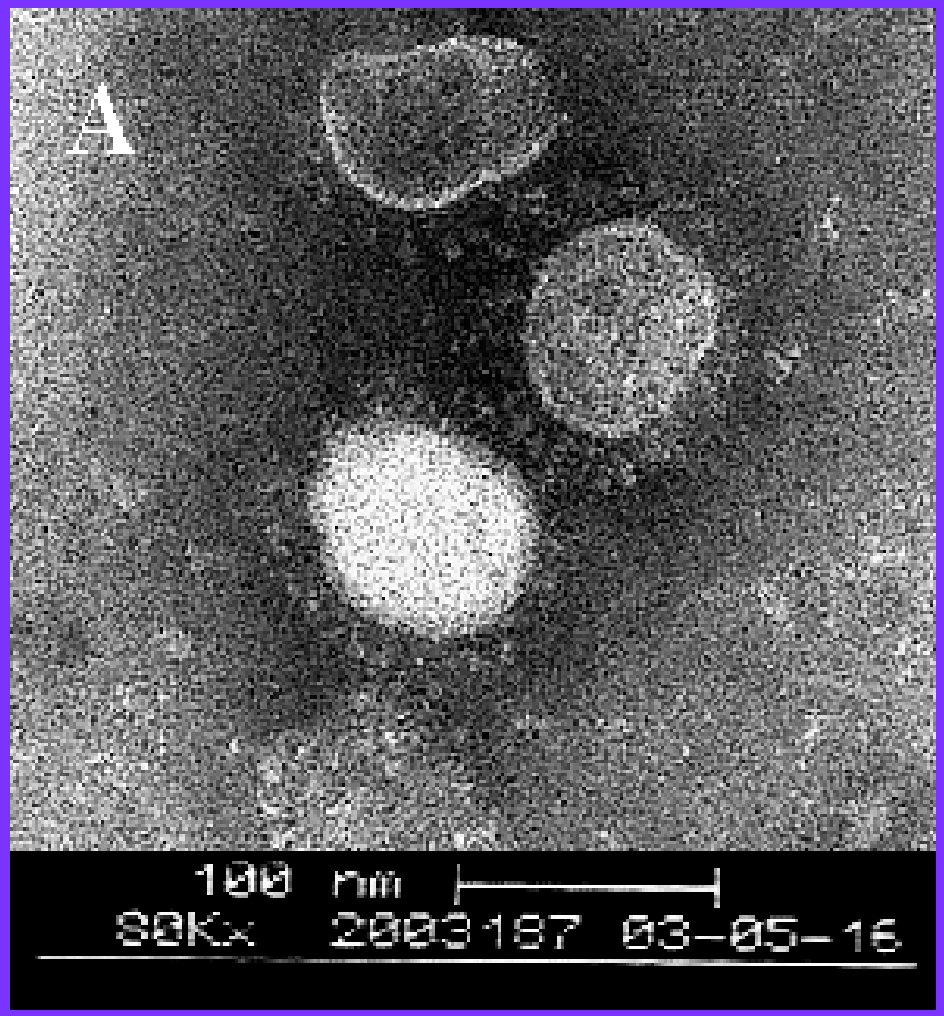
Raccoon-dog

1, PCR +,
isolation 1

Neutralizing antibody titer to SZ16

SZ12, CFB	160
SZ13, RC	>640
SZ17, HPC	>640

May 14, 2003



Coronavirus

Coronavirus inside cells

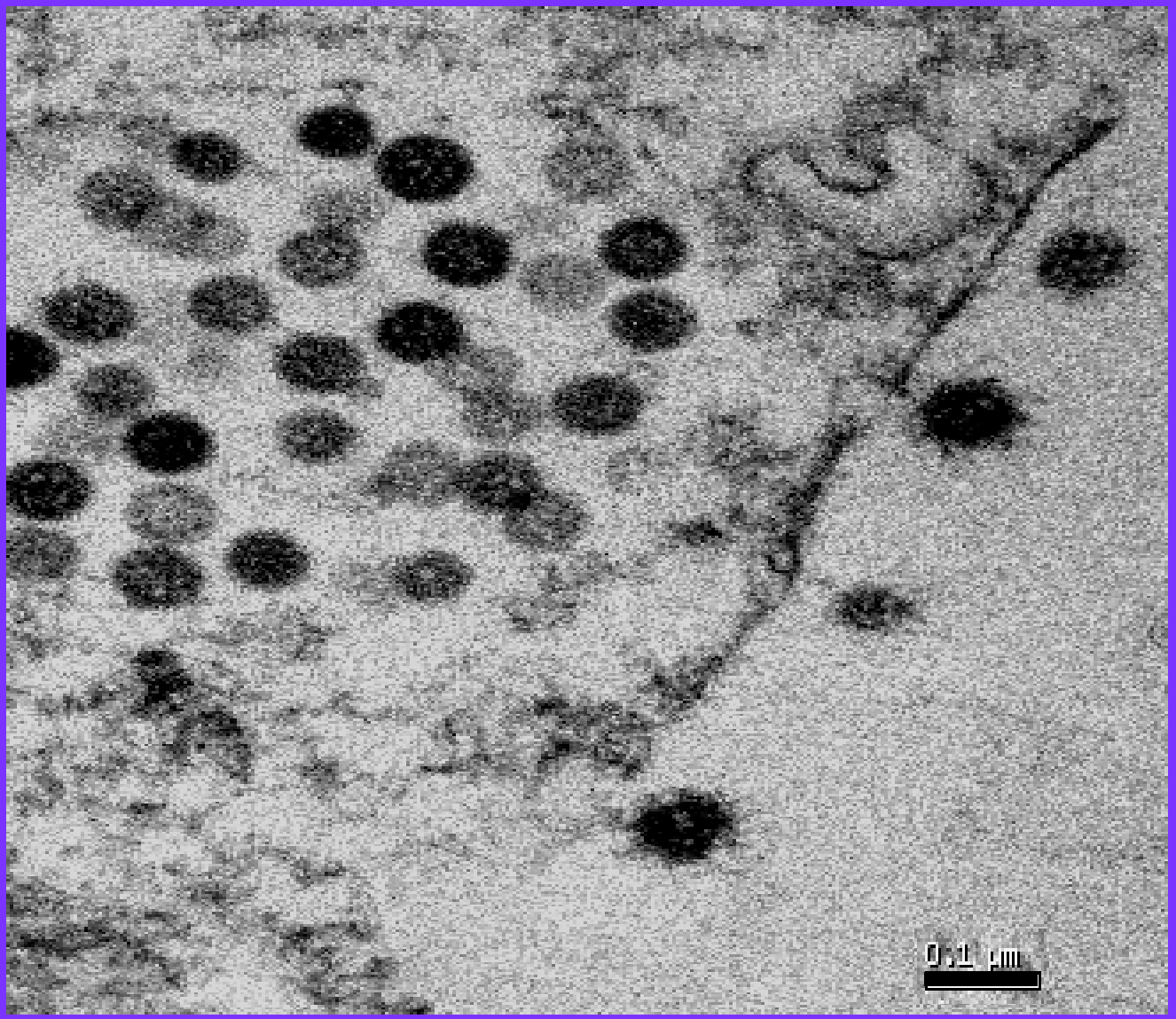
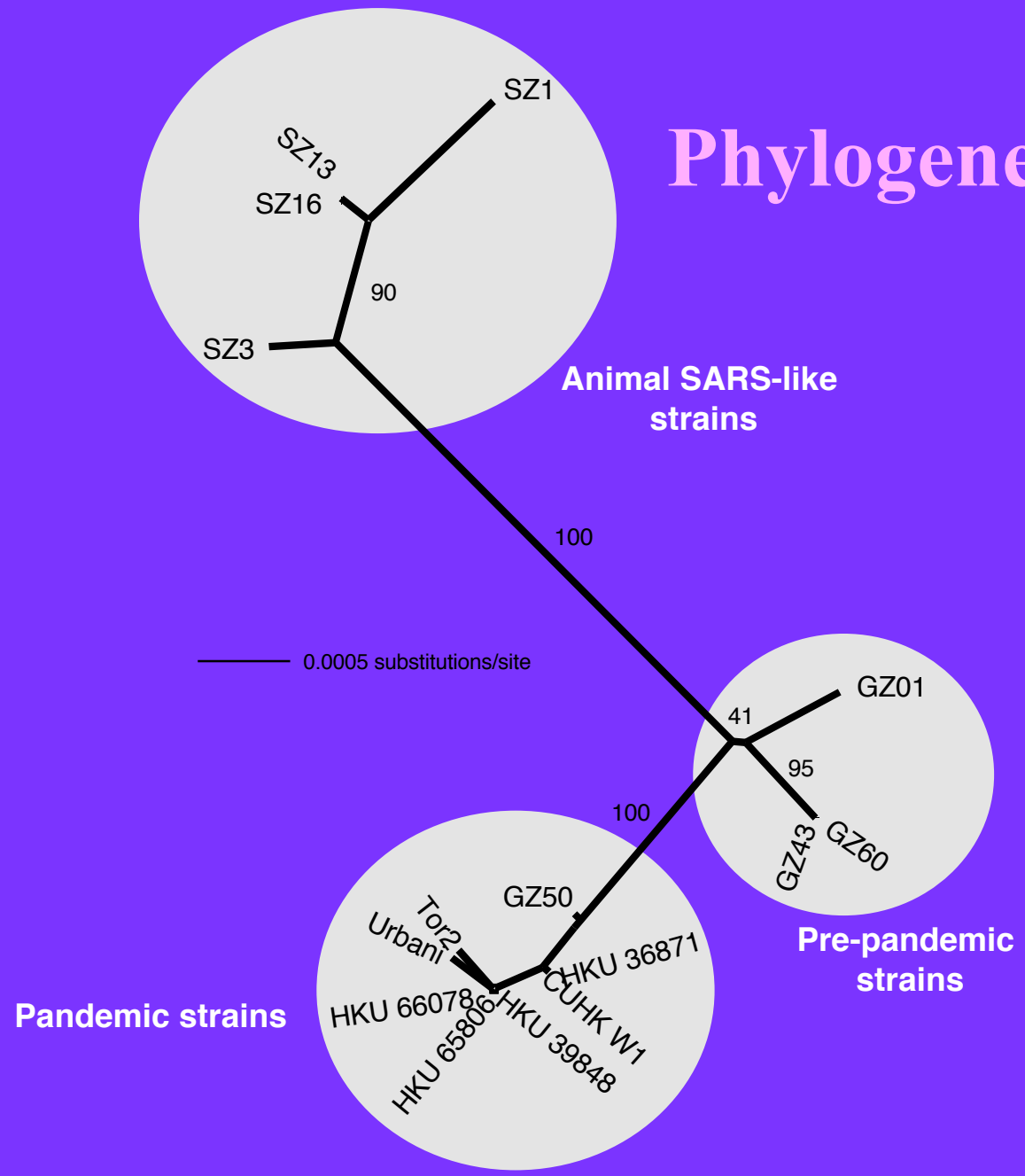


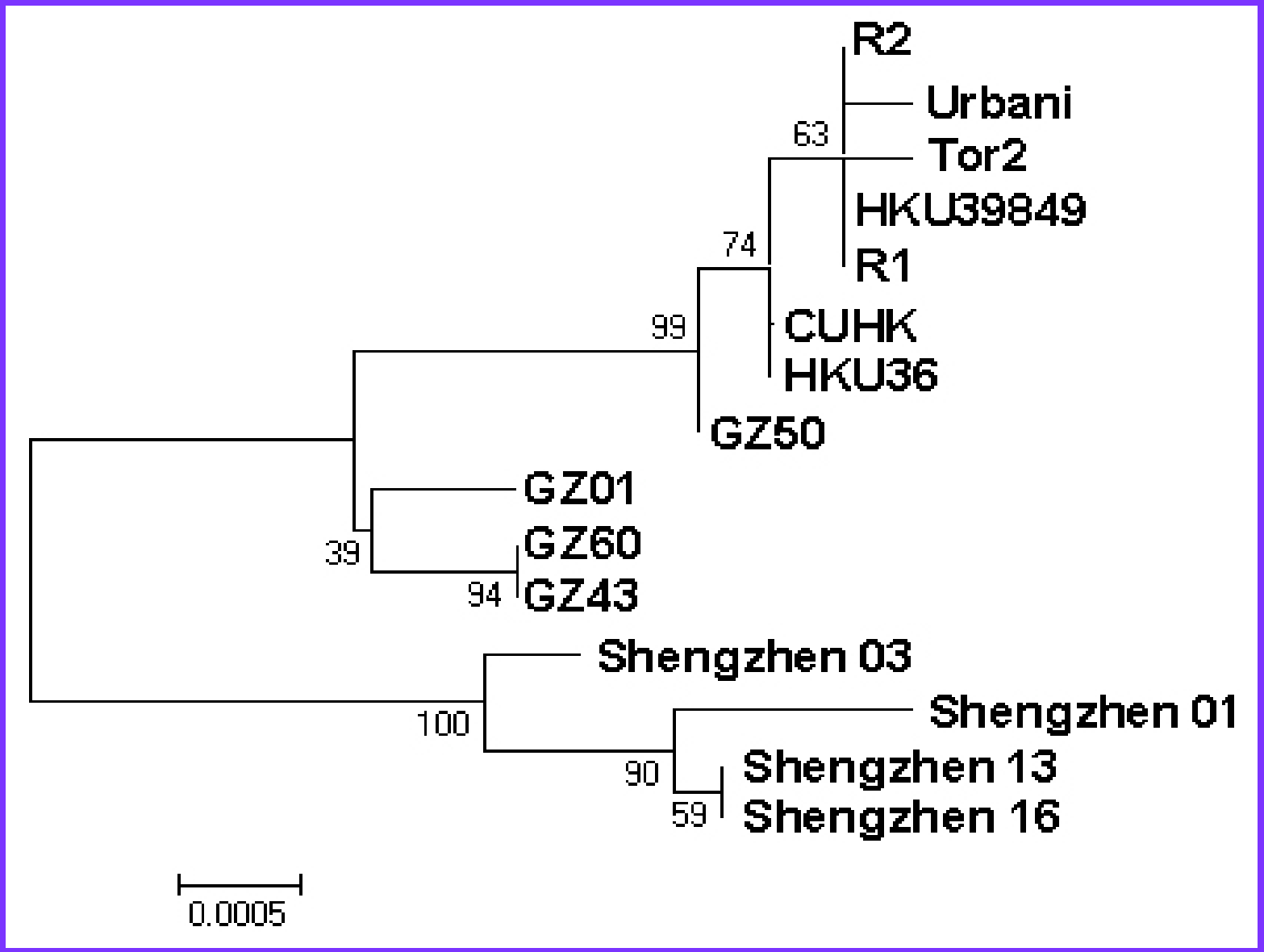
Table Nucleotide and amino acid substitutions of the SARS-like coronaviruses and SARS-Cov

SM	A (K)T(L)A(K)C(S)

CC TACTGGTTAC CAACCTGAAT GGAATAT

Phylogenetic tree




R2
Urbani
63
Tor2
HKU39849
74
R1
99
CUHK
HKU36
GZ50
GZ01
39
GZ60
94
GZ43
Shengzhen 03
100
Shengzhen 01
90
Shengzhen 13
59
Shengzhen 16
0.0005

Summary

1. SCoV-like viruses are prevalent in different types of wild animals in the retail market.
2. These animals together mankind forming a new ecosystem.
3. SARS is zoonosis.

Acknowledgements

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3. Staff at Dept. of Microbiology
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