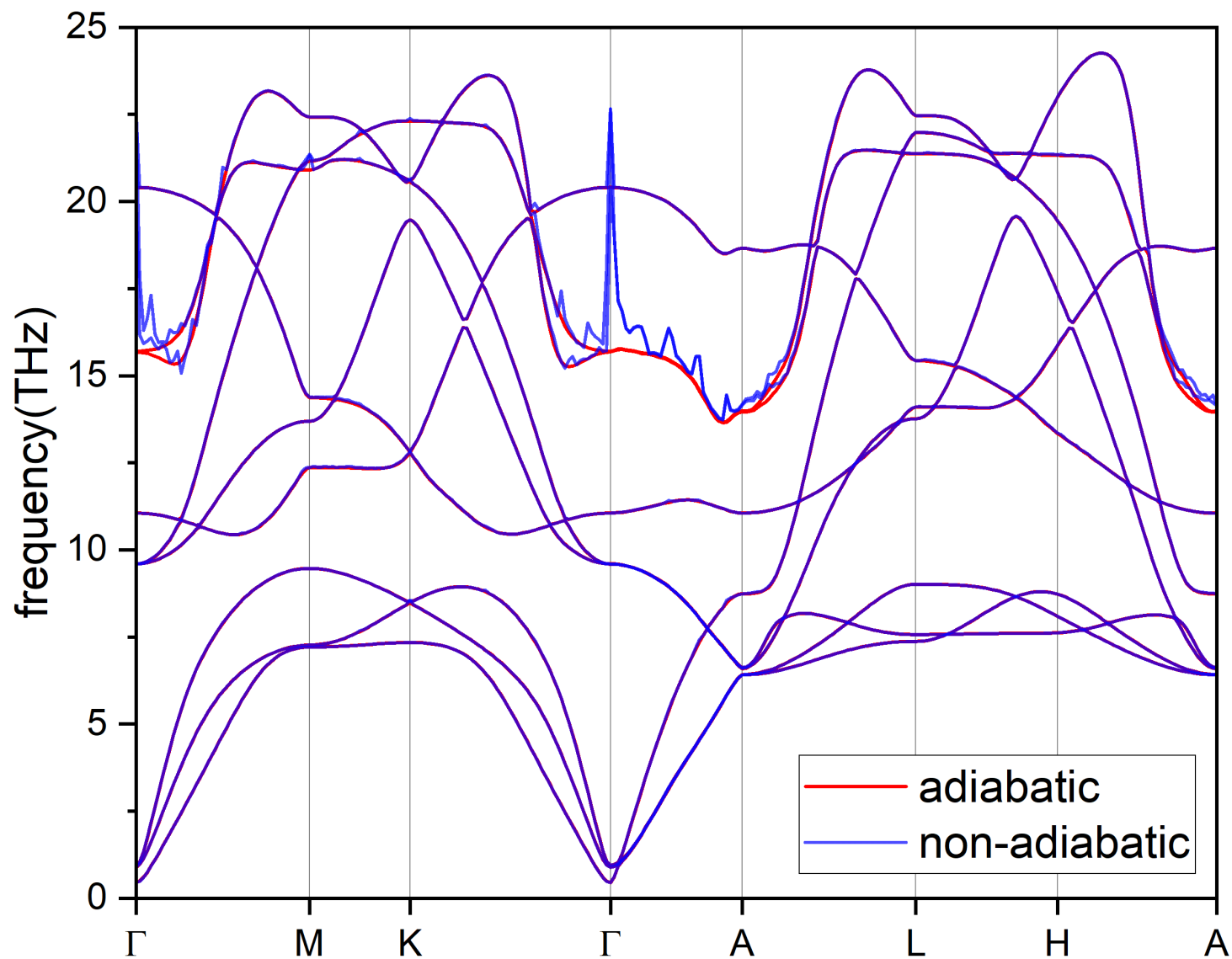input file from
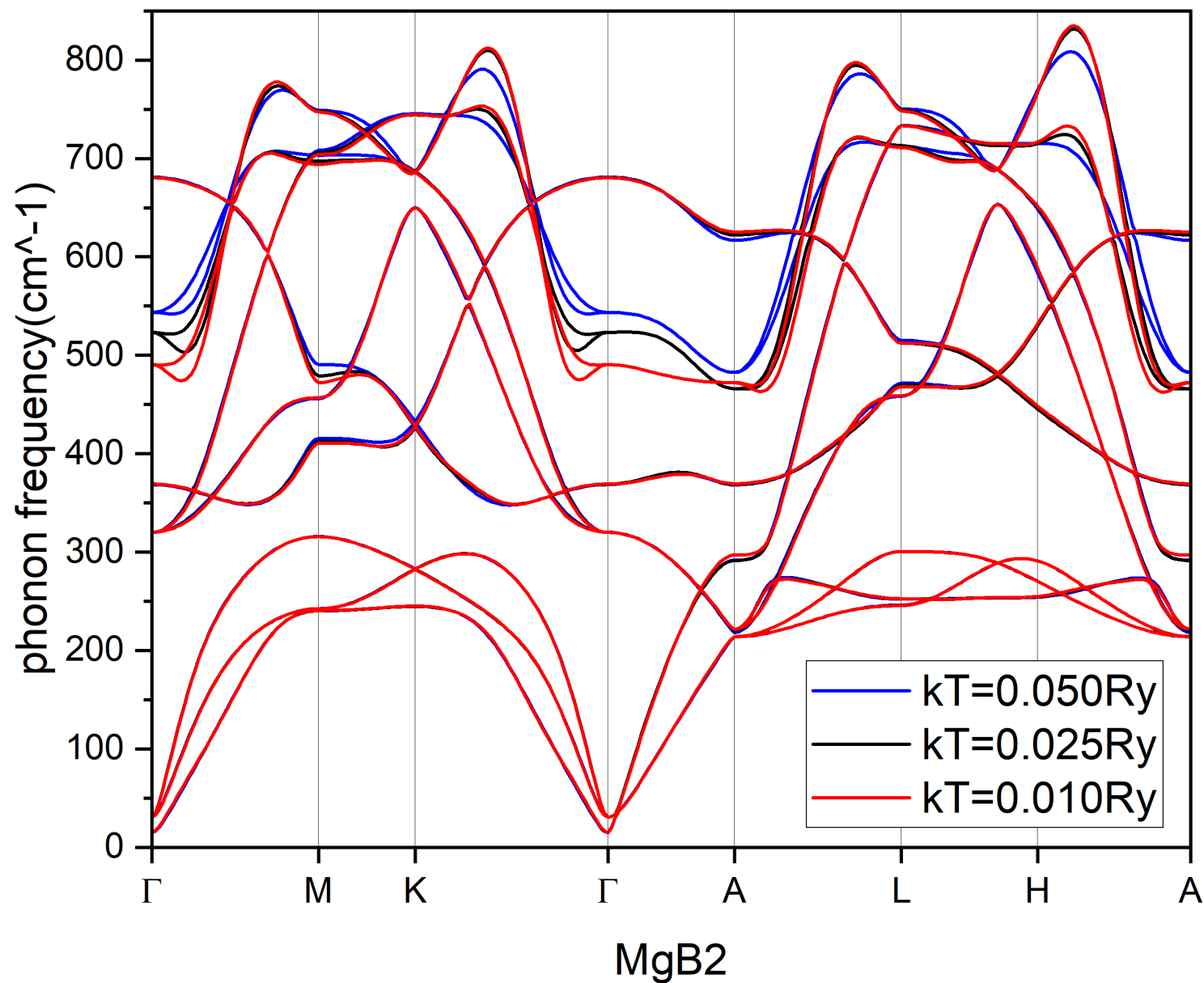epiq-EPIq-1.1/tutorials/mgb2/input_examples

q-points 6x6x4
asr: no

SCF calculation:
k-points 16x16x12
ecutwfc=35
smearing=methfessel-paxton
degauss=0.025
functional PBE
Pseudopotential from tutorials

broad_min=0.0005
q-points 6x6x4
asr: no
k-points 24x24x18
Ecutwfc=50
smearing=methfessel-paxton
degauss=0.025
functional PBE
Pseudopotential from tutorials

adiabatic phonon frequencies for different T

MgB2

k-points:

0.050 16x16x12

0.025 24x24x18

0.010 28x28x21

phonon frequency(cm^-1)

kT=0.050Ry
kT=0.025Ry
kT=0.010Ry