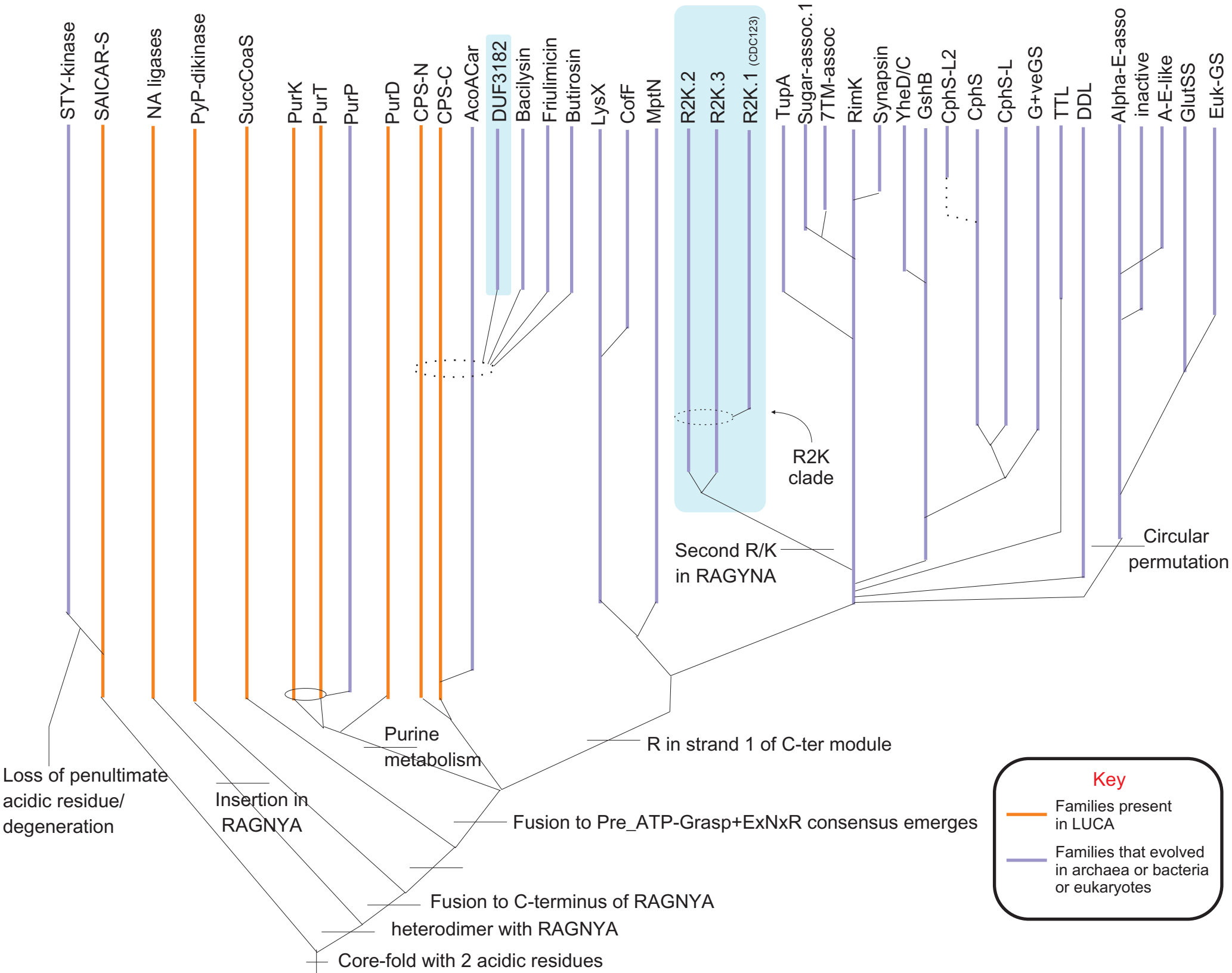
STY-kinase
SAICAR-S
NA ligases
PyP-dikinase
SuccCoaS
PurK
PurT
PurP
PurD
CPS-N
CPS-C
AcoACar
DUF3182
Bacilysin
Friulimicin
Butirosin
LysX
CofF
MptN
R2K.2
R2K.3
R2K.1 (CDC123)
TupA
Sugar-assoc.1
7TM-assoc
RimK
Synapsin
YheD/C
GshB
CphS-L2
CphS
CphS-L
G+veGS
TTL
DDL
Alpha-E-asso
inactive
A-E-like
GlutSS
Euk-GS
R2K clade
Second R/K in RAGYNA
Circular permutation
Purine metabolism
R in strand 1 of C-ter module
Loss of penultimate acidic residue/ degeneration
Insertion in RAGNYA
Fusion to Pre_ATP-Grasp+ExNxR consensus emerges
Fusion to C-terminus of RAGNYA
heterodimer with RAGNYA
Core-fold with 2 acidic residues
Key
Families present in LUCA
Families that evolved in archaea or bacteria or eukaryotes