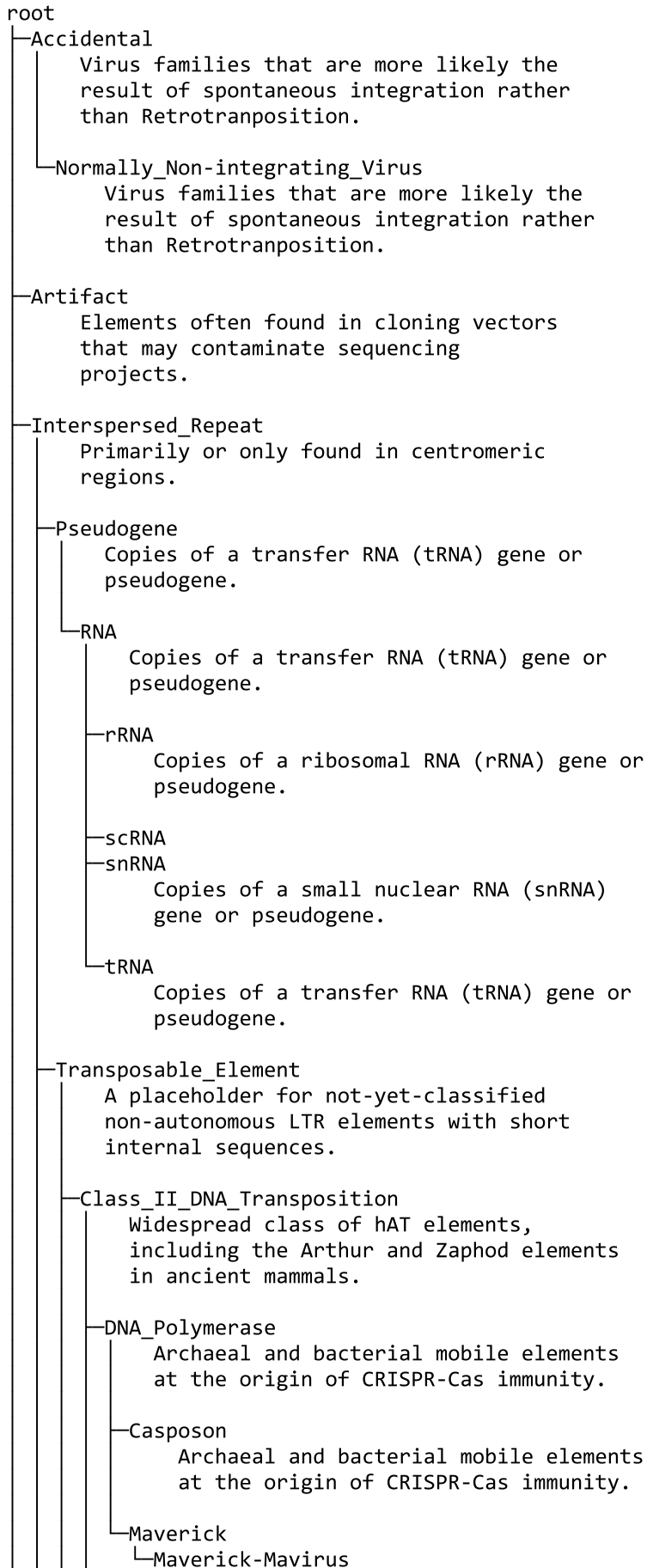
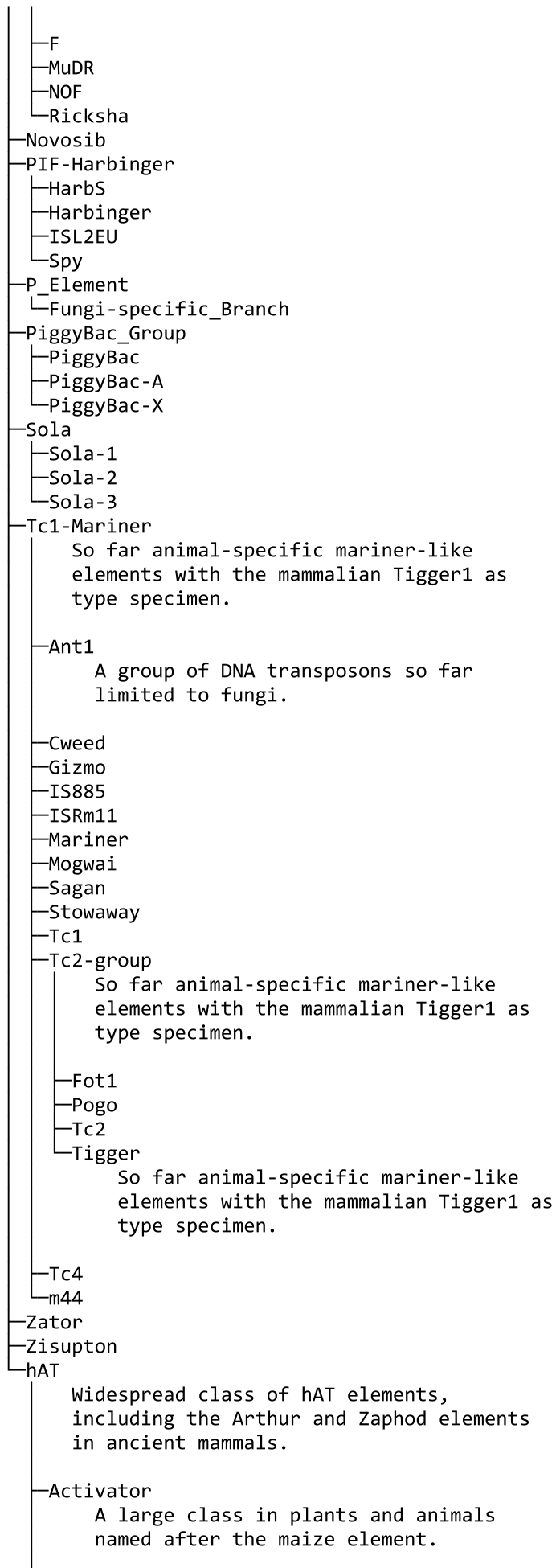


**Supplemental Figure 2.** The full Dfam classification system displayed as a linear tree with node descriptions where available.



- Helicase
  - Circular ssDNA Intermediate.
- Helitron-1
- Helitron-2
- Transposase
  - Widespread class of hAT elements, including the Arthur and Zaphod elements in ancient mammals.
- Academ
  - Family of Academ transposons described in rust fungi.
- Academ-1
  - First described family of Academ DNA transposon.
- Academ-2
  - Second described family of Academ DNA transposon.
- Academ-H
  - Family of Academ transposons described in rust fungi.
- CACTA
  - Group of DNA transposons at the basis of our adaptive immune system.
- CMC
  - So-far animal-specific elements with a specific DDE transposase.
- Chapaev\_group
  - So-far animal-specific elements with a specific DDE transposase.
- Chapaev
  - So-far animal-specific elements with a specific DDE transposase.
- Chapaev-3
  - So-far animal-specific elements with a specific DDE transposase.
- EnSpm
- Mirage
- Transib
  - Group of DNA transposons at the basis of our adaptive immune system.
- Dada
- Ginger
  - Ginger-1
  - Ginger-2
- IS3EU
- Kolobok
  - Hydra-specific\_Branch
  - Kolobok-E
  - Kolobok-H
  - T2
- Merlin
- Mutator-like
  - Mutator-like Element aka MULE.



- Blackjack  
A group of hAT transposons possibly closest to Charlie elements.
- Charlie  
Mostly animal-specific hAT transposons with the mammalian Charlie1 as type specimen.
- Pegasus
- Restless
- Tag1
- Tip100  
Widespread class of hAT elements, including the Arthur and Zaphod elements in ancient mammals.
- hAT1
- hAT19
- hAT5
- hAT6
- hATm
- hATw
- hATx
- hobo

—Tyrosine\_Recombinase

- Crypton
  - Crypton-A
  - Crypton-C
  - Crypton-F
  - Crypton-H
  - Crypton-I
  - Crypton-R
  - Crypton-S
  - Crypton-V
  - Crypton-X

—Class\_I\_Retrotransposition

A placeholder for not-yet-classified non-autonomous LTR elements with short internal sequences.

—LINE

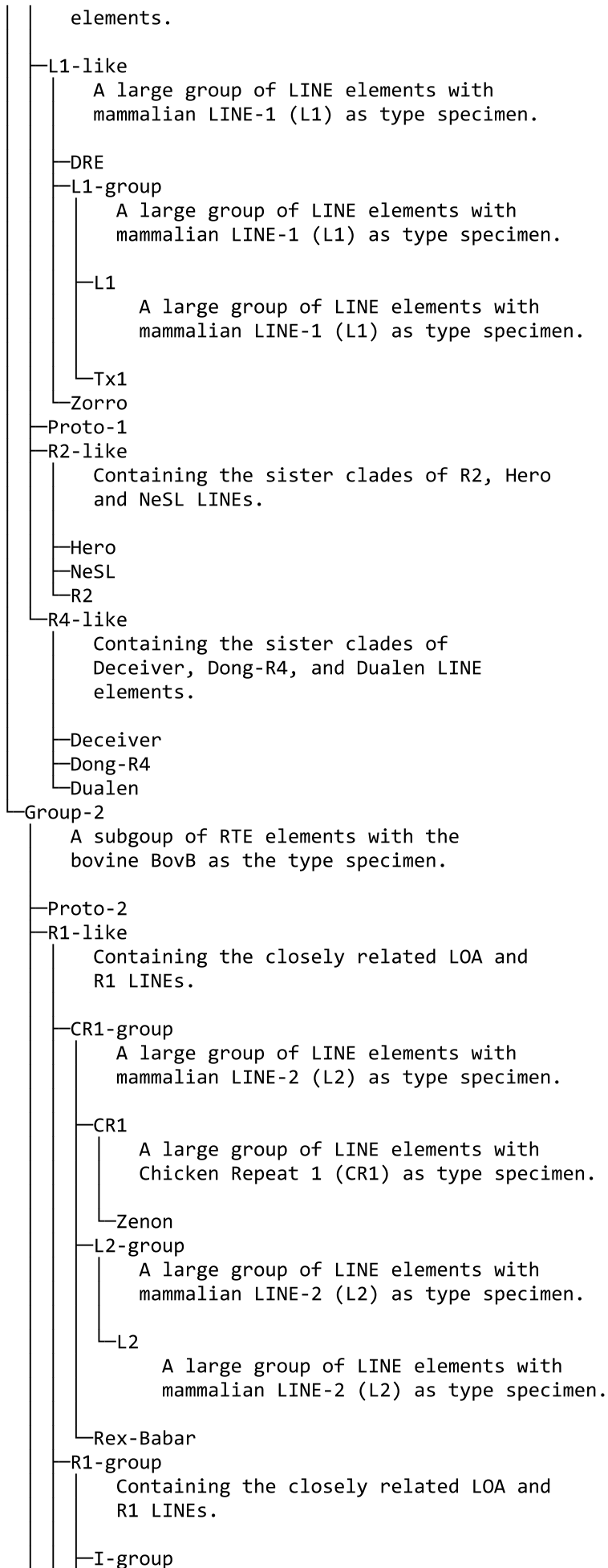
A subgroup of RTE elements with the bovine BovB as the type specimen.

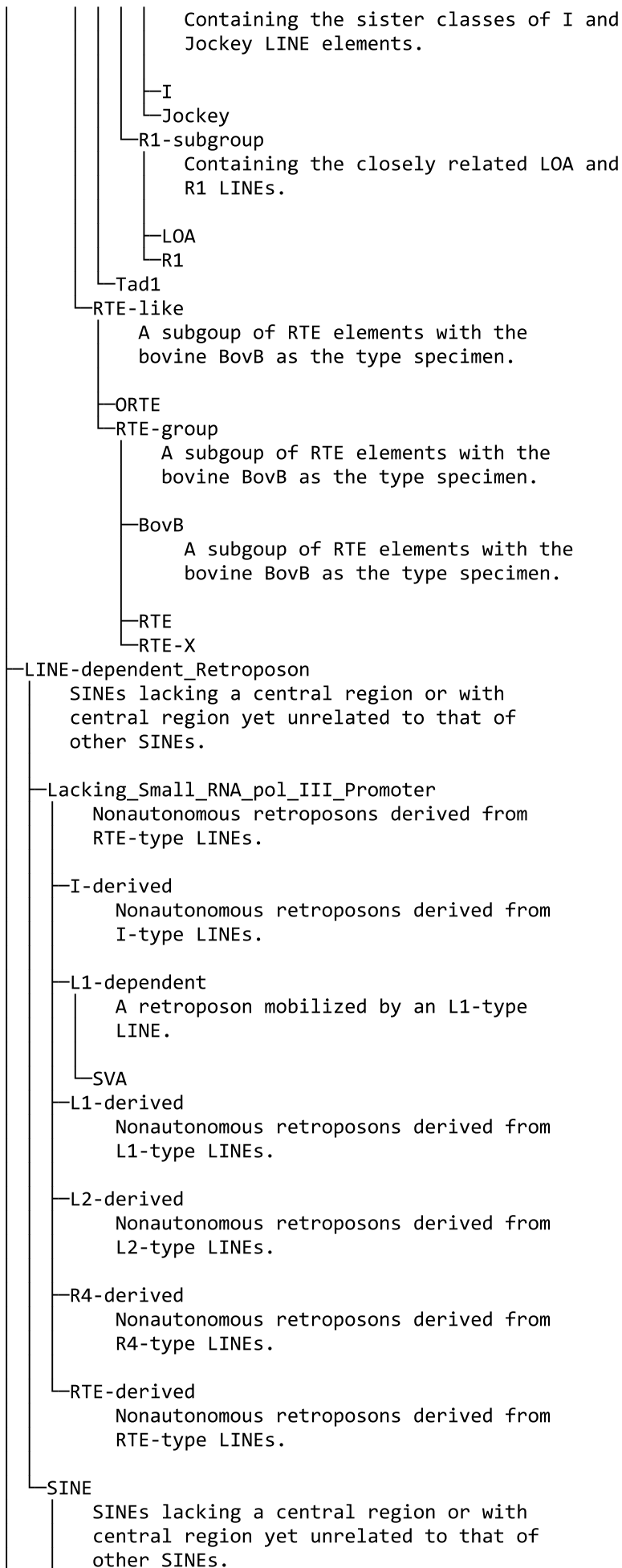
- Group-I  
A group of LINE so far specific to Diatoms.
- Ambal  
A group of LINE so far specific to Diatoms.
- CRE
  - CRE-1
  - CRE-2
- Odin

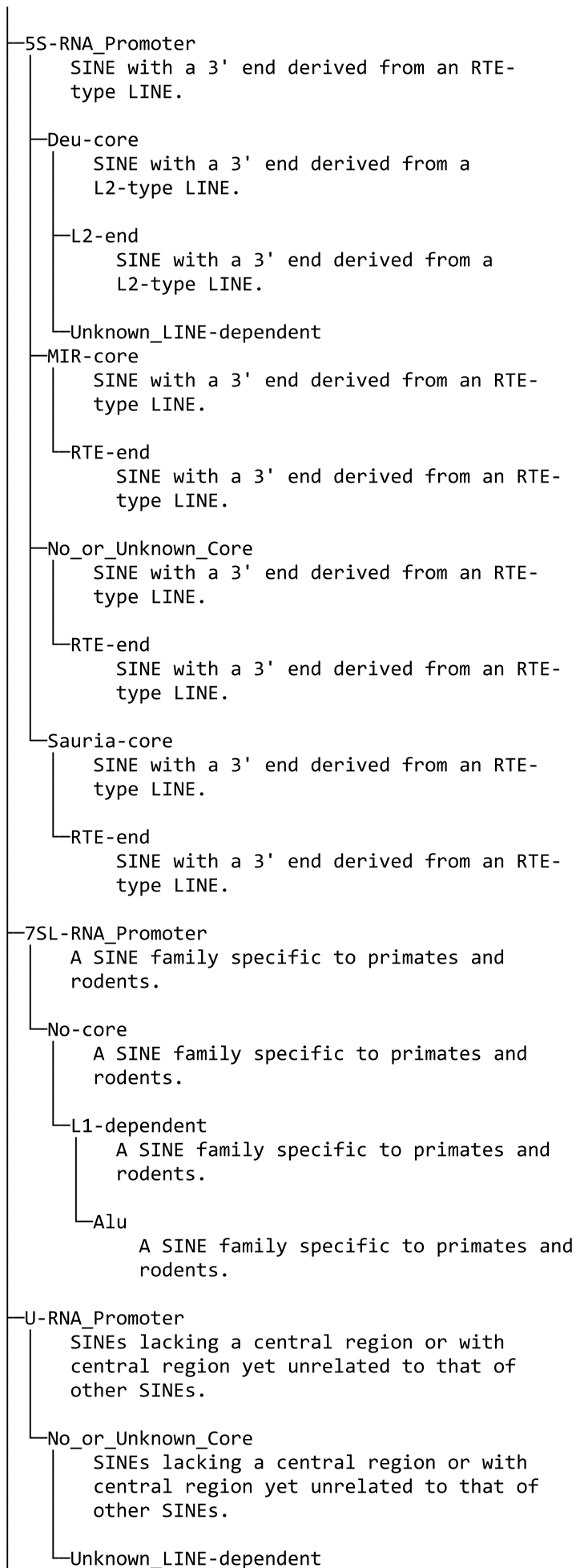
—Group-II

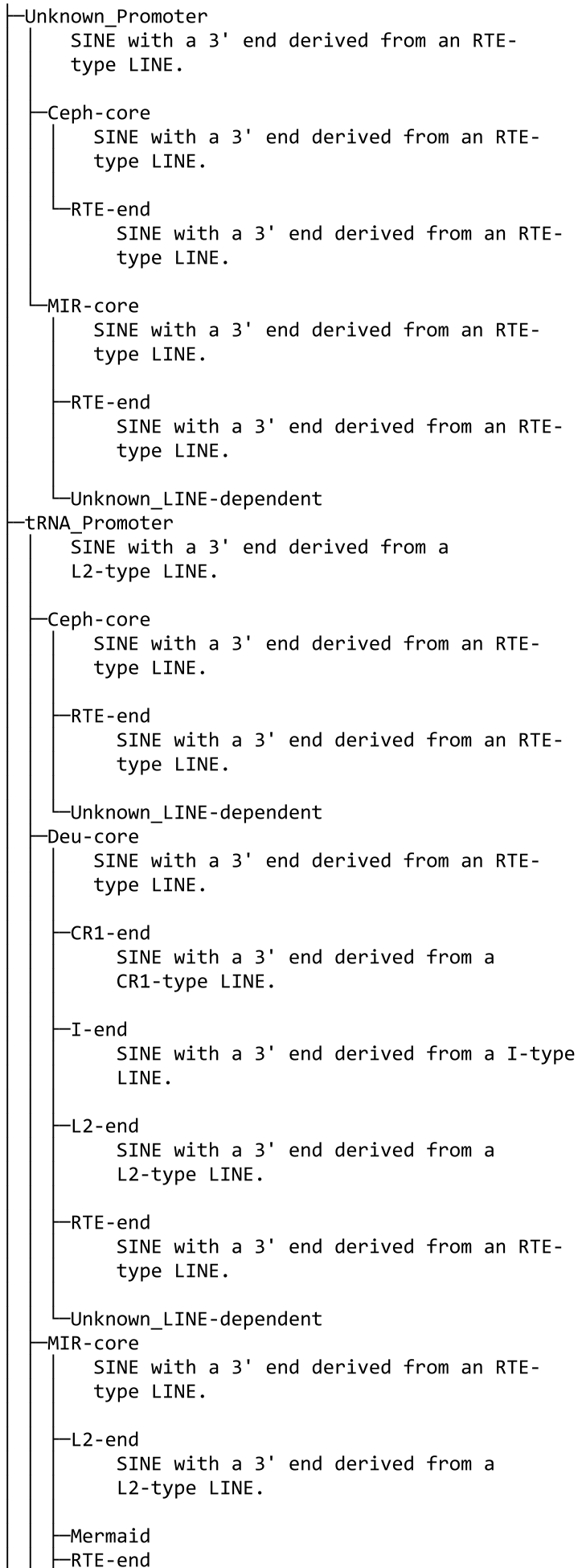
A subgroup of RTE elements with the bovine BovB as the type specimen.

- Genie
- Group-1  
Containing the sister clades of Deceiver, Dong-R4, and Dualen LINE











- SINE with a 3' end derived from an RTE-type LINE.
- Unknown\_LINE-dependent
- Meta-core
  - Animal-wide conserved SINE central region.
- Unknown\_LINE-dependent
- No-core
  - A rodent specific SINE family.
- L1-dependent
  - A rodent specific SINE family.
- B2
  - A rodent specific SINE family.
- No\_or\_Unknown\_Core
  - SINE with a 3' end derived from a Tad1-type LINE.
- BovB-end
  - SINE with a 3' end derived from a BovB-type LINE.
- CR1-end
  - SINE with a 3' end derived from a CR1-type LINE.
- I-end
  - SINE with a 3' end derived from a I-type LINE.
- Jockey-end
- L1-dependent
  - A retroposon mobilized by an L1-type LINE.
- L2-end
  - SINE with a 3' end derived from a L2-type LINE.
- R1-end
  - SINE with a 3' end derived from an R1-type LINE.
- R2-end
  - SINE with a 3' end derived from an R2-type LINE.
- RTE-end
  - SINE with a 3' end derived from an RTE-type LINE.
- Rex-end
  - SINE with a 3' end derived from an Rex-type LINE.
- Tad1\_End
  - SINE with a 3' end derived from a Tad1-type LINE.
- Unknown\_LINE-dependent
- Sauria-core

