

Rfam contains 2791 families, each represented by a

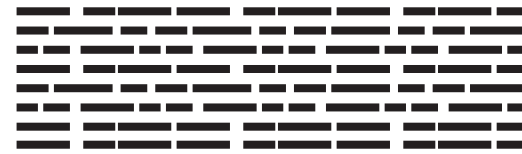
- SEED alignment
- covariance model (CM)
- list of annotated hits in Rfamseq database (more than 2 million hits)

If you submit a family to Rfam, these tools become available to the community, allowing it to be annotated in genomes and other datasets.

Rfam also includes community annotation of families (wikipedia), RNA motifs, secondary structure diagrams, alignment statistics, taxonomic information, and sequence search capability.

rfam.xfam.org

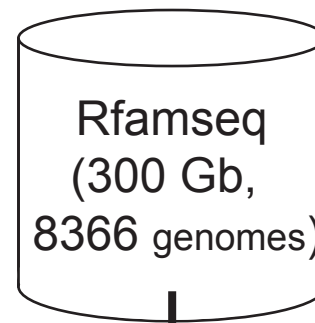
Rfam SEED alignment including consensus structure annotation



↓ cmbuild,
cmcalibrate



↓ *previously required
BLAST
pre-filters* cmsearch



↓
“homologs”

Types of RNAs in Rfam

<i>count</i>	<i>type</i>
239	Cis-reg;
28	Cis-reg; frameshift-element;
32	Cis-reg; IRES;
30	Cis-reg; leader;
31	Cis-reg; riboswitch;
10	Cis-reg; thermoregulator;
76	Gene;
29	Gene; antisense;
11	Gene; antitoxin;
64	Gene; CRISPR;
217	Gene; lncRNA;
530	Gene; miRNA;
23	Gene; ribozyme;
15	Gene; rRNA;
3	Gene; snRNA;
463	Gene; snRNA; snoRNA; CD-box;
266	Gene; snRNA; snoRNA; HACA-box;
24	Gene; snRNA; snoRNA; scaRNA;
15	Gene; snRNA; splicing;
471	Gene; sRNA;
2	Gene; tRNA;
9	Intron;

