siRNAmod: A database of experimentally validated chemically modified siRNAs

Showkat Ahmad Dar¹, Anamika Thakur¹, Abid Qureshi¹ and Manoj Kumar^{1,*}

1 Bioinformatics Centre, Institute of Microbial Technology, Council of Scientific and Industrial Research, Sector 39A, Chandigarh-160036, India

* To whom correspondence should be addressed: Tel.: +91-172-6665453; Fax: +91-172-2690585, 2690632; Email: manojk@imtech.res.in

Showkat Ahmad Dar

Bioinformatics Centre, Institute of Microbial Technology, Council of Scientific and Industrial Research, Sector 39A, Chandigarh-160036, India showkat@imtech.res.in

Anamika Thakur

Bioinformatics Centre, Institute of Microbial Technology, Council of Scientific and Industrial Research, Sector 39A, Chandigarh-160036, India anamikathakur@imtech.res.in

Abid Qureshi

Bioinformatics Centre, Institute of Microbial Technology, Council of Scientific and Industrial Research, Sector 39A, Chandigarh-160036, India qureshisaab@imtech.res.in

Manoj Kumar

Bioinformatics Centre, Institute of Microbial Technology, Council of Scientific and Industrial Research, Sector 39A, Chandigarh-160036, India manojk@imtech.res.in

Additional files

Additional file 1

Figure S1. Distribution of natural and non-natural chemical modifications.

Figure S2. Relative frequency of chemical modifications on sense and antisense cm-siRNAs for 21 base pair.

Figure S3. Cumulative frequency of cm-siRNA modifications on sense and antisense sequences.

Figure S4. Grouping frequency of different unique chemical modifications.

Figure S5. Cell lines distribution in siRNAmod database.

Natural and non natural based distribution of chemical modifications

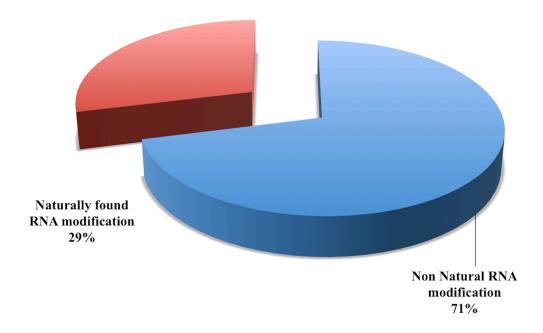


Figure S1. Distribution of natural and non-natural chemical modifications.

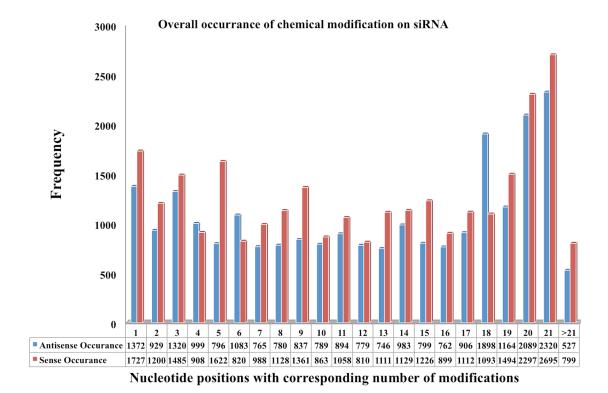


Figure S2. Relative frequency of chemical modifications on sense and antisense cm-siRNAs for 21 base pair. Nucleotide position represented as 1 to 21 both starting from 5' end on X-axis. >21 signifies end modifications or additional modifications attached after 21st nucleotide. Further number of each position is provided below its corresponding position.

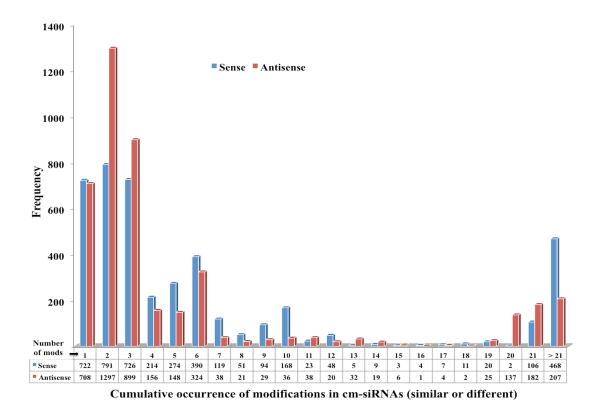


Figure S3. Cumulative frequency of cm-siRNA modifications on sense and antisense sequences. Number of Mods on X-axis represents the cumulative number of modifications on cm-siRNAs i.e. total number of modifications (same or different) are present on the particular cm-siRNAs. Their respective numbers are also provided in proceeding rows on X-axis.

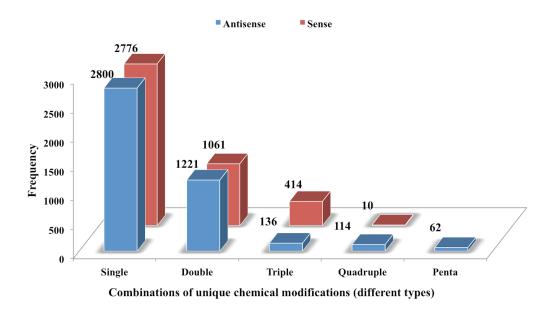


Figure S4. Grouping frequency of different unique chemical modifications i.e. how many different modifications are grouped in cm-siRNAs.

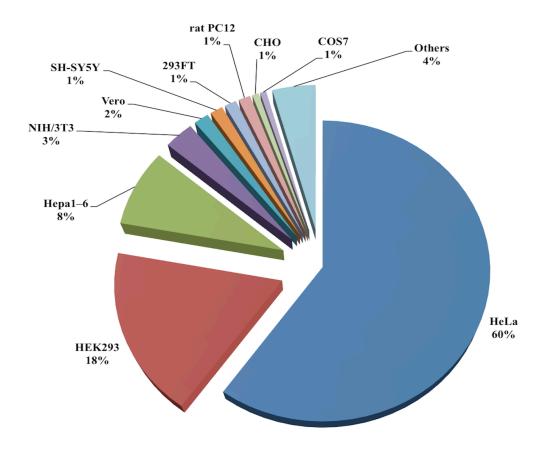


Figure S5. Cell lines distribution in siRNAmod database.