Table 1 Classification of lncRNA databases

| Database name | Characteristics | Website |
|---------------|--|---------------------------|
| Noncode | Established by Institute of Computing, Chinese Academy of Sciences, it is by far | http://www.noncode.org |
| | the most complete database of non-coding RNA (Liu, 2004). When using this | |
| | database, there is a place that needs to be paid special attention. Since this | |
| | database uses a set of lncRNA naming system specified by itself, if the general | |
| | naming system is used to search in this database, the desired lncRNA cannot be | |
| | found. Here is a way to find the lncRNA we want in this database. Blast function | |
| | is provided in this database. If the user has the nucleic acid sequence of lncRNA, | |
| | the corresponding number of lncRNA in this database can be found according to | |
| | blast results, so as to further find the annotation information that the user wants. | |
| IncRNADisease | The database collects more than 160 disease-related lncRNA and provides | http://cmbi.bjmu.edu.cn/l |
| | annotations of disease-related lncRNA reported in literature (Chen et al., 2012). | ncrnadisease |
| | It is worth mentioning that this database provides the function of browsing | |
| | lncRNA annotation information on the website, which makes it much easier for | |
| | us to annotate lncRNA. | |
| CHIPBase | This database is significantly rich in content, so you can find a lot of lncRNA | http://deepbase.sysu.edu. |
| | comments here. This database also provides the loci that bind lncRNA and | cn/chipbase/ |
| | expression map to transcription factors identified by RNA-seq (Yang et al., | |
| | 2013). | |
| IncRNAdb | The database collects eukaryotes lncRNA information that has been reported in | http://www.lncrnadb.org/ |
| | the literature. Each entry in the database contains reference information about | |
| | RNA, the expression of lncRNA, subcellular localization and conservative, | |
| | functional evidence and other relevant information. We can use the lncRNAdb | |
| | database to continuously proofread the literature related to lncRNA and other | |
| | genomic elements (Amaral et al., 2011). | |