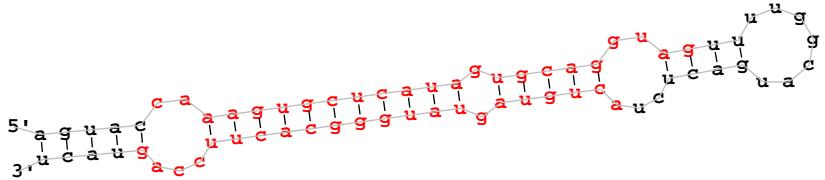


```
miRBase precursor      : hsa-mir-20b
Total read count       : 4128
hsa-miR-20b-5p read count : 4077
hsa-miR-20b-3p read count : 30
remaining reads        : 21
```



hsa-miR-20b-3p

5'-	hsa-miR-20b-5p	-3'	exp	
		reads	mm	sample
.....	aguacc aaagugc ucauagug caggua guuuggca ugacucu acuguagu auggggca cuuccag uacu	(((...(((((((((.(((.(((.....))))....))))....))))....))))	.....	Z3_-
.....	caaagug Uucauagug cagggu	2	1	Z3_-
.....	caaagugc cuauagug cagggu	26	0	Z3_-
.....	caaUgugc cuauagug cagggu	1	1	Z3_-
.....	caaagugc cuauagug caggC	2	1	Z3_-
.....	caaagugc cucaCagug caggua	1	1	Z3_-
.....	caaagugc cuauagug Uaggua	1	1	Z3_-
.....	caaagugc cuauagug caggua	10	0	Z3_-
.....	caaagugc cuauagug cagguaU	1	1	Z3_-
.....	caaagugc cuauagug cagguaG	1	1	Z3_-
.....	caaagugc cuauagug cagguaA	11	1	Z3_-
.....	caaagugc cuauagug cagguaGg	3	1	Z3_-
.....	caaagugc cuauagug cagguaug	106	0	Z3_-
.....	caaagugc cuauagug Uagguaug	1	1	Z3_-
.....	caaagugc cuauaAug cagguaug	1	1	Z3_-
.....	caaagugc uauagug cagguaug	4	1	Z3_-
.....	caaagugc ucaCagug cagguaug	4	1	Z3_-
.....	Uaaagugc cuauagug cagguaug	4	1	Z3_-
.....	caaaguAc cuauagug cagguaug	1	1	Z3_-
.....	caaagugc cuauagCgc agguaug	1	1	Z3_-
.....	caaagugc cuauagug cagguaug	45	0	Z3_-
.....	caaagugc cuauagug cagguaugC	4	1	Z3_-
.....	caaagugc cuauagug cagguaAu	1	1	Z3_-
.....	caaagugc cuauagug cagguaA	208	1	Z3_-
.....	caaagugc cuauagug cagguaG	5	1	Z3_-
.....	caaagugc cuauagug cagguaAu	1	1	Z3_-
.....	.....ac uguaguau auggggcac uuuc.....	1	0	Z3_-
.....	.....ac uguaguau auggggcac uuU.....	1	1	Z3_-
.....	caaagugc cuauagug caggua	23	0	Z1_-
.....	caaagug Uucauagug caggua	1	1	Z1_-
.....	caaagugc cuauagug caggC	2	1	Z1_-
.....	Caaagugc cuauagug caggua	1	1	Z1_-
.....	caaagugc uauagug caggua	2	1	Z1_-
.....	caaagugc cuauagug caggua	24	0	Z1_-

hsa-miR-20b-3p

hsa-miR-20b-5p

aguacaaagugcucauagugcagguagguuuuggcaugacucacuguauugggcacuuuccguacu

.....caaagugcucaCagugcaggua.....	1	1	Z1_
.....CaaagugcCcauagugcaggua.....	1	1	Z1_
.....caaagGgcucauagugcaggua.....	1	1	Z1_
.....caaagugcucauagugGggua.....	3	1	Z1_
.....caaagugcucauagugcaggua.....	197	0	Z1_
.....caaagCgcucauagugcaggua.....	1	1	Z1_
.....caaagugcucauagugcaggGg.....	1	1	Z1_
.....CGaagugcucauagugcaggua.....	2	1	Z1_
.....caaagugcucauagugcagguaA.....	11	1	Z1_
.....caaagugcucGuagugcaggua.....	2	1	Z1_
.....caaagugcuUuaugugcaggua.....	2	1	Z1_
.....caaagugcucauagugcagguaU.....	1	1	Z1_
.....caaagugcucauaguUcaggua.....	2	1	Z1_
.....caaagugcucauGgugcaggua.....	1	1	Z1_
.....Uaaagugcucauagugcaggua.....	1	1	Z1_
.....caaagugcuUuaugugcaggua.....	2	1	Z1_
.....caaagugcucauagugcaggua.....	145	0	Z1_
.....caaagugUucauagugcaggua.....	1	1	Z1_
.....CaaagugcucauagugcagguaA.....	437	1	Z1_
.....CaaagugcAcauagugcaggua.....	1	1	Z1_
.....caaagugcucauGgugcaggua.....	1	1	Z1_
.....caaagugcucauagugcagguaG.....	7	1	Z1_
.....caaagugcucauagCgcaggua.....	1	1	Z1_
.....caaagugCcauagugcaggua.....	2	1	Z1_
.....aaagugcucauagugcaggua.....	1	0	Z1_
.....Caagugcucauagugcaggua.....	2	1	Z1_
.....ucuacuguaguauugggcacu.....	1	0	Z1_
.....ucuacuguaguauugggcacuuc.....	2	0	Z1_
.....acuguaguauugggcacuuc.....	8	0	Z1_
.....acuguaguauugggcacuuU.....	1	1	Z1_
.....acuguaguauugggcacuucc.....	1	0	Z1_
.....caaagugcucauagugUag.....	1	1	GDM
.....caaagugcucauagugUagg.....	5	1	GDM
.....caaagugcucauagugcagg.....	5	0	GDM
.....caaagugcucauagugcagg.....	5	0	GDM
.....caaagugcucauagugUagg.....	5	1	GDM
.....caaagugcucaCagugcagg.....	3	1	GDM
.....CaaagugcucaCagugcagg.....	3	1	GDM
.....caaagugcucauaguAcaggua.....	2	1	GDM
.....caaagugcucauagugcagAu.....	2	1	GDM
.....caaagugCcauagugcaggua.....	1	1	GDM
.....caaagugcucauagugcaggA.....	4	1	GDM
.....caaagugcucauagugcaggA.....	4	1	GDM
.....caaagugcucauagugcaggua.....	149	0	GDM
.....caaagugcucauagugcaggC.....	12	1	GDM
.....caaagugcucauagugcaggC.....	12	1	GDM
.....caaaguglucauagugcaggua.....	1	1	GDM
.....CaaagugcuUuaugugcaggua.....	1	1	GDM
.....caaagugcucauagugcaggua.....	149	0	GDM
.....caaagugcucauagugcagAu.....	2	1	GDM
.....Uaaagugcucauagugcaggua.....	7	1	GDM
.....caaagugcucauagCgcaggua.....	2	1	GDM
.....caaagugcucauagugcaggua.....	149	0	GDM
.....caaagugcucauagugcaggC.....	12	1	GDM
.....Uaaagugcucauagugcaggua.....	7	1	GDM
.....caaagugcucauagugcaggua.....	87	0	GDM
.....caaagugcuUuaugugcaggua.....	4	1	GDM
.....caaagugcucauagugcaggua.....	87	0	GDM
.....CaaagugcuUuaugugcaggua.....	4	1	GDM
.....caaagugcucauagCgcaggua.....	2	1	GDM
.....caaagugcucauagugcagAu.....	2	1	GDM
.....caaagugcucauagugUaggua.....	2	1	GDM
.....caaagugcucauagugCggua.....	1	1	GDM
.....CaaagugcucaCagugcaggua.....	10	1	GDM
.....Uaaagugcucauagugcaggua.....	2	1	GDM

hsa-miR-20b-3p

hsa-miR-20b-5p

aguacaaagugcucauagugcagguagguuuuggcaugacucuacuguacuacuguaugggcacuuuccaguacu

.....caaagugcucaCagugcaggua.....	10	1	GDM
.....caaagugcuUauagugcaggua.....	4	1	GDM
.....caaagugcucaCagugcaggua.....	10	1	GDM
.....caaagugcucauagugcGggua.....	1	1	GDM
.....caaagugcucauagugUaggua.....	2	1	GDM
.....caaagugcucauagugcaggG.....	2	1	GDM
.....caaagugcAcauagugcaggua.....	1	1	GDM
.....CaaGgugcucauagugcaggua.....	1	1	GDM
.....caaagugcucauagugcaggua.....	87	0	GDM
.....cGaagugcucauagugcaggua.....	1	1	GDM
.....caaagugcucauagugcaggG.....	2	1	GDM
.....Uaaagugcucauagugcaggua.....	22	1	GDM
.....caaagugcucauagugcagguaU.....	7	1	GDM
.....caUagugcucauagugcaggua.....	1	1	GDM
.....caaagugcucauagugcagguaC.....	3	1	GDM
.....caaagugcuUaaugugcaggua.....	19	1	GDM
.....caaagugcucauagugcagguaC.....	3	1	GDM
.....caaagugcucauagugUaggua.....	2	1	GDM
.....caaagugcucauagCgcaggua.....	2	1	GDM
.....caGagugcucauagugcaggua.....	4	1	GDM
.....caaagugcucauagugcaggua.....	550	0	GDM
.....CaaagugcucaCagugcaggua.....	9	1	GDM
.....caaagugcucauagCgcaggua.....	2	1	GDM
.....caaagugcucauagugcaggCag.....	1	1	GDM
.....caaagugCcuaugugcaggua.....	2	1	GDM
.....caaagCgcucauagugcaggua.....	2	1	GDM
.....caaagugcucauagugcagguCg.....	6	1	GDM
.....caaagugcucauagugcaggGg.....	3	1	GDM
.....caaagugCcuaugugcaggua.....	2	1	GDM
.....caGagugcucauagugcaggua.....	4	1	GDM
.....caaagugcuUauagugcaggua.....	19	1	GDM
.....Uaaagugcucauagugcaggua.....	22	1	GDM
.....caaagugcucauagugcagguaA.....	37	1	GDM
.....caaagugcucauagugCUGguag.....	2	1	GDM
.....caaagugcucauagugcaggGag.....	2	1	GDM
.....caaagugcucaCagugcaggua.....	9	1	GDM
.....caaagugcucauagugcaggua.....	550	0	GDM
.....CaGagugcucauagugcaggua.....	4	1	GDM
.....caaagugcucauagugcagAuag.....	1	1	GDM
.....caaagugcucauagugUaggua.....	2	1	GDM
.....caaagugcucauauAgcaggua.....	1	1	GDM
.....caaagugcucauagugcaggua.....	7	1	GDM
.....caaagugcucaCagugcaggua.....	9	1	GDM
.....caaagugcucauaguCcaggua.....	1	1	GDM
.....caaagugcucauagugCUGguag.....	2	1	GDM
.....caaagugcuUauagugcaggua.....	19	1	GDM
.....Aaaagugcucauagugcaggua.....	2	1	GDM
.....CaaaguAcucauagugcaggua.....	1	1	GDM
.....CaaagugcuUauagugcaggua.....	1	1	GDM
.....CaaagugcucGuagugcaggua.....	3	1	GDM
.....caaagugcucauagugcagguaU.....	7	1	GDM
.....caaagugcucauagugcagguaA.....	37	1	GDM
.....CaaGgugcucauagugcaggua.....	3	1	GDM
.....caaUgugcucauagugcaggua.....	1	1	GDM
.....caaagugcucauGgugcaggua.....	1	1	GDM
.....caaagugcucauagugcaggua.....	550	0	GDM
.....caaGgugcucauagugcaggua.....	3	1	GDM
.....CaaagugcucGuagugcaggua.....	3	1	GDM
.....caaagugcucauagugcagguaA.....	37	1	GDM
.....Uaaagugcucauagugcaggua.....	22	1	GDM
.....cGaagugcucauagugcaggua.....	1	1	GDM
.....caaagugcucauagugcaggGg.....	3	1	GDM
.....Uaaagugcucauagugcaggua.....	4	1	GDM
.....caaagugcucaCagugcaggua.....	2	1	GDM
.....caaagugcucauagugcGggua.....	2	1	GDM
.....caaagugcuUauagugcaggua.....	9	1	GDM
.....caaagugcucauagugcaggua.....	10	1	GDM
.....caaagugcuUauagugcaggua.....	9	1	GDM
.....caaagugcucauagugcaggCagu.....	3	1	GDM

hsa-miR-20b-3p

hsa-miR-20b-5p

aguacaaagugcucauaugcagguaguuuuggcaugacucaacuguauagggcacuuccaguacu

.....caaagugcucaua <u>ugcaggua</u> g.....	891	1	GDM
.....caaagu <u>Acu</u> cau <u>ugcaggua</u> gu.....	1	1	GDM
.....caaagu <u>Ucu</u> cau <u>ugcaggua</u> gu.....	1	1	GDM
.....Aaaagugcucaua <u>ugcaggua</u> gu.....	2	1	GDM
.....caaagugcucaua <u>ugcaggua</u> gu.....	206	0	GDM
.....caaagugcucaua <u>ugcaggua</u> gu.....	206	0	GDM
.....caaagugcucaua <u>ugcaggua</u> gA.....	891	1	GDM
.....CaaagCgc <u>cucaua</u> ug <u>ugcaggua</u> gu.....	4	1	GDM
.....Caaagugcucaua <u>ugcaggua</u> g <u>Uaggua</u> gu.....	2	1	GDM
.....c <u>Gagugcucaua</u> ug <u>ugcaggua</u> gu.....	3	1	GDM
.....caaagugcucaua <u>ugcaggua</u> gC.....	18	1	GDM
.....caaagugcucaua <u>ugcaggua</u> gA.....	891	1	GDM
.....Uaaagugcucaua <u>ugcaggua</u> gu.....	4	1	GDM
.....caaagugcucaua <u>ugcaggua</u> gu.....	206	0	GDM
.....caaagugcucaua <u>ugcaggC</u> agu.....	3	1	GDM
.....caaagugcucaua <u>ugcaggC</u> agu.....	3	1	GDM
.....Aaaagugcucaua <u>ugcaggua</u> gu.....	2	1	GDM
.....CaaagugC <u>cucaua</u> ug <u>ugcaggua</u> gu.....	2	1	GDM
.....Uaaagugcucaua <u>ugcaggua</u> gu.....	4	1	GDM
.....caaagugcucaua <u>ugcaggua</u> gC.....	18	1	GDM
.....caaagug <u>cucGu</u> ag <u>ugcaggua</u> gu.....	1	1	GDM
.....Caaagug <u>cucaua</u> ug <u>ugcaggua</u> g.....	10	1	GDM
.....CaaGg <u>ugcucaua</u> ug <u>ugcaggua</u> gu.....	3	1	GDM
.....c <u>Gaagugcucaua</u> ug <u>ugcaggua</u> gu.....	2	1	GDM
.....caaagug <u>cucaua</u> ug <u>ugcaggua</u> gC.....	18	1	GDM
.....caa <u>Ggugcucaua</u> ug <u>ugcaggua</u> gu.....	3	1	GDM
.....caaagug <u>cucaua</u> ug <u>ugcaggua</u> g.....	10	1	GDM
.....caaagug <u>cucaua</u> ug <u>ugcaggA</u> gu.....	1	1	GDM
.....caa <u>agugC</u> c <u>cucaua</u> ug <u>ugcaggua</u> gu.....	2	1	GDM
.....caa <u>agugcucaua</u> ug <u>ugcaggua</u> g <u>Au</u>	2	1	GDM
.....caa <u>agugcucaua</u> ug <u>ugcaggua</u> uu.....	2	0	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u>	1	0	GDM
.....Ca <u>agugcucaua</u> ug <u>ugcaggua</u>	1	1	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u> A.....	1	1	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u>	5	0	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u>	5	0	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u>	7	0	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u>	7	0	GDM
.....aa <u>agugcucaua</u> ug <u>ugcaggua</u> g.....	10	1	GDM
.....u <u>cuacu</u> guau <u>agggcacu</u>	10	0	GDM
.....u <u>cuacu</u> guau <u>agggcac</u> C.....	1	1	GDM
.....u <u>cuacu</u> guG <u>uau</u> gggcacu.....	1	1	GDM
.....u <u>cuacu</u> guau <u>agggcacu</u>	10	0	GDM
.....u <u>cuacu</u> guau <u>agggcacu</u> uc.....	2	0	GDM
.....u <u>cuacu</u> guau <u>agggcacu</u> U.....	2	1	GDM
.....u <u>cuacu</u> guau <u>agggcacu</u> U.....	2	1	GDM
.....ac <u>uguau</u> au <u>agggcacu</u> uc.....	10	0	GDM
.....ac <u>uguau</u> au <u>agggcacu</u> uc.....	10	0	GDM
.....ac <u>uguau</u> au <u>agggcacu</u> ucc.....	1	0	GDM
.....ac <u>uguau</u> au <u>agggcacu</u> cca.....	3	0	GDM
.....ac <u>uguau</u> au <u>agggcacu</u> cca.....	3	0	GDM
.....ccaa <u>agugcucaua</u> ug <u>ugcaggua</u> g.....	1	1	Z2_-
.....caa <u>agugcucaua</u> ug <u>ugcagg</u>	2	0	Z2_-
.....c <u>Gaagugcucaua</u> ug <u>ugcagg</u>	1	1	Z2_-
.....Aaa <u>agugcucaua</u> ug <u>ugcagg</u>	1	1	Z2_-
.....caa <u>agugcucaua</u> ug <u>ugcagg</u>	1	1	Z2_-
.....caa <u>agugcucaua</u> ug <u>ugcagg</u>	30	0	Z2_-
.....caa <u>agugcucaua</u> ug <u>ugcagg</u> C.....	2	1	Z2_-
.....caa <u>agugcucaua</u> ug <u>ugcagg</u> a.....	24	0	Z2_-
.....caa <u>agugcucu</u> Ca <u>ugcaggua</u>	2	1	Z2_-
.....caa <u>agCgcucaua</u> ug <u>ugcaggua</u>	3	1	Z2_-
.....Uaa <u>agugcucaua</u> ug <u>ugcaggua</u>	7	1	Z2_-
.....c <u>Gaagugcucaua</u> ug <u>ugcaggua</u>	1	1	Z2_-
.....c <u>Gagugcucaua</u> ug <u>ugcaggua</u>	1	1	Z2_-
.....caa <u>agugcucaua</u> ug <u>ugcgg</u> Ag.....	2	1	Z2_-
.....caa <u>agugcucaua</u> Ca <u>ugcaggua</u>	5	1	Z2_-
.....caa <u>agugcucaua</u> u <u>Agcaggua</u>	1	1	Z2_-
.....caa <u>agugcucaua</u> u <u>Agcaggua</u> A.....	7	1	Z2_-

hsa-miR-20b-3p

hsa-miR-20b-5p

aguaccaaagugcucauaugugcagguaguuuuuggcaugacuacuguaguaugggcacuuccaguacu

.....Aaaagugcucauauagugcaggua <u>g</u>	1	1	z2_
.....caaagugcu <u>U</u> auaugugcaggua <u>g</u>	11	1	z2_
.....caaagugcucauauagugcaggua <u>g</u>	148	0	z2_
.....caaagugcucauauagugcaggua <u>U</u>	2	1	z2_
.....caaagugcucauauag <u>C</u> gcaggua <u>g</u>	2	1	z2_
.....caaagugcucauauagugGaggua <u>g</u>	1	1	z2_
.....caaagugcucauauagugcaggua <u>G</u>	2	1	z2_
.....caaagugcucauauagugcaggua <u>A</u>	257	1	z2_
.....caaagugcucauauagugcaggua <u>u</u>	28	0	z2_
.....caaagugcucauauagu <u>A</u> caggua <u>u</u>	1	1	z2_
.....aaagugcucauauagugcaggua <u>g</u>	1	0	z2_
.....u <u>u</u> acuguaguau <u>ggg</u> cacuu <u>A</u>	2	1	z2_
.....u <u>u</u> acuguaguau <u>ggg</u> cacuu <u>U</u>	2	1	z2_
.....a <u>c</u> uguaguau <u>ggg</u> cacuu <u>u</u>	2	0	z2_