

Supplemental Table S2: Details of high-throughput genomics data obtained from publicly available datasets

Sl. No.	Species	Dataset type	Genotype	Source tissue	SRA number	GSE number	Reference
1	<i>Arabidopsis thaliana</i>	Small RNA-seq	Col-0	14d old seedlings	SRX2766992	GSE98285	(Yang et al. 2017)
2	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrpd1</i>	14d old seedlings	SRX2766989	GSE98285	(Yang et al. 2017)
3	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrpe1</i>	14d old seedlings	SRX2766990	GSE98285	(Yang et al. 2017)
4	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrpd1nrpe1</i>	14d old seedlings	SRX1240828	GSE72993	(Zhang et al. 2016)
5	<i>Arabidopsis thaliana</i>	Small RNA-seq	Col-0	Inflorescence	SRX1012515	GSE61439	(Zhai et al. 2015)
6	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrpd1</i>	Inflorescence	SRX1012518	GSE61439	(Zhai et al. 2015)
7	<i>Arabidopsis thaliana</i>	Small RNA-seq	Col-0	Inflorescence	SRX1142679	GSE61439	(Zhai et al. 2015)
8	<i>Arabidopsis thaliana</i>	Small RNA-seq	Col-0	Inflorescence	SRX1142680	GSE61439	(Zhai et al. 2015)
9	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrpb2</i>	Inflorescence	SRX1142681	GSE61439	(Zhai et al. 2015)
10	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrpb2</i>	Inflorescence	SRX1142682	GSE61439	(Zhai et al. 2015)

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11	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nripd1dcl3</i>	Inflorescence	SRX1012521	GSE61439	(Zhai et al. 2015)
12	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>rdr2</i>	Inflorescence	SRX1012520	GSE61439	(Zhai et al. 2015)
13	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>rdr2dcl3</i>	Inflorescence	SRX1012522	GSE61439	(Zhai et al. 2015)
14	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nrip(d/e)2</i>	Inflorescence	SRX1012519	GSE61439	(Zhai et al. 2015)
15	<i>Arabidopsis thaliana</i>	Small RNA-seq	Col-0	Inflorescence	SRX7175631	GSE140566	(Li et al. 2020)
16	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nripd1</i>	Inflorescence	SRX7175632	GSE140566	(Li et al. 2020)
17	<i>Arabidopsis thaliana</i>	Small RNA-seq	3xMyc_NRPD1_Complementation	Inflorescence	SRX7175633	GSE140566	(Li et al. 2020)
18	<i>Arabidopsis thaliana</i>	Small RNA-seq	3xMyc_NRPD1_Complementation	Inflorescence	SRX7175634	GSE140566	(Li et al. 2020)
19	<i>Arabidopsis thaliana</i>	AGO1-IP	Col-0	Inflorescence	SRX6385963	GSE133618	(Panda et al. 2020)
20	<i>Arabidopsis thaliana</i>	AGO1-IP	Col-0	Inflorescence	SRX6385964	GSE133618	(Panda et al. 2020)
21	<i>Arabidopsis</i>	Mock-IP	Col-0	Inflorescence	SRX6385965	GSE133618	(Panda et al. 2020)

	<i>thaliana</i>						
22	<i>Arabidopsis thaliana</i>	Mock-IP	Col-0	Inflorescence	SRX6385966	GSE133618	(Panda et al. 2020)
23	<i>Arabidopsis thaliana</i>	AGO1-IP	<i>nripd1</i>	Inflorescence	SRX6385967	GSE133618	(Panda et al. 2020)
24	<i>Arabidopsis thaliana</i>	AGO1-IP	<i>nripd1</i>	Inflorescence	SRX6385968	GSE133618	(Panda et al. 2020)
25	<i>Arabidopsis thaliana</i>	Mock-IP	<i>nripd1</i>	Inflorescence	SRX6385969	GSE133618	(Panda et al. 2020)
26	<i>Arabidopsis thaliana</i>	Mock-IP	<i>nripd1</i>	Inflorescence	SRX6385970	GSE133618	(Panda et al. 2020)
27	<i>Arabidopsis thaliana</i>	Mock-IP (for AGO4)	Col-0	Inflorescence	SRX1142683	GSE61439	(Zhai et al. 2015)
28	<i>Arabidopsis thaliana</i>	AGO4-IP	Col-0	Inflorescence	SRX1142684	GSE61439	(Zhai et al. 2015)
29	<i>Arabidopsis thaliana</i>	PoIII - CHIP	Col-0	Inflorescence	SRX1142672	GSE61439	(Zhai et al. 2015)
30	<i>Arabidopsis thaliana</i>	PoIII - CHIP	<i>nripd1</i>	Inflorescence	SRX1142673	GSE61439	(Zhai et al. 2015)
31	<i>Arabidopsis thaliana</i>	PoIII - CHIP	<i>dcl234</i>	Inflorescence	SRX1142674	GSE61439	(Zhai et al. 2015)
32	<i>Arabidopsis</i>	CHIP-INPUT	Col-0	Inflorescence	SRX2884373	GSE99694	(Zhou et al.

	<i>s thaliana</i>						2018)
33	<i>Arabidopsis thaliana</i>	PoIV-ChIP	Col-0	Inflorescence	SRX2916399	GSE100010	(Liu et al. 2018)
34	<i>Arabidopsis thaliana</i>	Mock-IP	Col-0	Inflorescence	SRX2916398	GSE100010	(Liu et al. 2018)
35	<i>Arabidopsis thaliana</i>	PoIV-ChIP	<i>nripd1</i>	Inflorescence	SRX2916401	GSE100010	(Liu et al. 2018)
36	<i>Arabidopsis thaliana</i>	Mock-IP	<i>nripd1</i>	Inflorescence	SRX2916400	GSE100010	(Liu et al. 2018)
37	<i>Oryza sativa</i>	Small RNA-seq	WT-Nipponbare	Seedlings	SRX5724235	GSE130166	(Wang et al. 2022)
38	<i>Oryza sativa</i>	Small RNA-seq	WT-Nipponbare	Seedlings	SRX5724236	GSE130166	(Wang et al. 2022)
39	<i>Oryza sativa</i>	Small RNA-seq	<i>rdr2-6</i>	Seedlings	SRX5724237	GSE130166	(Wang et al. 2022)
40	<i>Oryza sativa</i>	Small RNA-seq	WT-Nipponbare	Panicle	SRX5724233	GSE130166	(Wang et al. 2022)
41	<i>Oryza sativa</i>	Small RNA-seq	<i>rdr2-6</i>	Panicle	SRX5724234	GSE130166	(Wang et al. 2022)
42	<i>Oryza sativa</i>	Small RNA-seq	<i>nripd1</i>	Seedlings	SRX921921	GSE158709	(Zheng et al. 2021)
43	<i>Oryza sativa</i>	Small RNA-seq	<i>nripe1</i>	Seedlings	SRX921922	GSE158709	(Zheng et al. 2021)
44	<i>Oryza sativa</i>	Small RNA-seq	<i>nripe1</i>	Seedlings	SRX921920	GSE158709	(Zheng et al. 2021)

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45	<i>Oryza sativa</i>	AGO1a-IP	WT	Seedlings	SRX014804	GSE18250	(Wu et al. 2009)
46	<i>Oryza sativa</i>	AGO1b-IP	WT	Seedlings	SRX014805	GSE18250	(Wu et al. 2009)
47	<i>Oryza sativa</i>	AGO1c-IP	WT	Seedlings	SRX014806	GSE18250	(Wu et al. 2009)
48	<i>Oryza sativa</i>	AGO4a-IP	WT	Seedlings	SRX017394	GSE20748	(Wu et al. 2010)
49	<i>Oryza sativa</i>	AGO4b-IP	WT	Seedlings	SRX017395	GSE20748	(Wu et al. 2010)
50	<i>Oryza sativa</i>	AGO16-IP	WT	Seedlings	SRX017396	GSE20748	(Wu et al. 2010)
51	<i>Oryza sativa</i>	Small RNA-seq	WT	Seedlings	SRX017400	GSE20748	(Wu et al. 2010)
52	<i>Arabidopsis thaliana</i>	Methylome	WT	Inflorescence	SRX2884303	GSE99689	(Zhou et al. 2018)
53	<i>Arabidopsis thaliana</i>	Methylome	<i>nripd1</i>	Inflorescence	SRX2884312	GSE99689	(Zhou et al. 2018)
54	<i>Oryza sativa</i>	Small RNA-seq	WT Rep1	Leaf	SRX11930857	PRJNA758109	(Chakraborty et al. 2022)
55	<i>Oryza sativa</i>	Small RNA-seq	WT Rep2	Leaf	SRX11930858	PRJNA758109	(Chakraborty et al. 2022)
56	<i>Oryza sativa</i>	Small RNA-seq	WT Rep3	Leaf	SRX11930859	PRJNA758109	(Chakraborty et al. 2022)
57	<i>Oryza sativa</i>	Small RNA-seq	<i>nrip(d/e)2</i> Rep1	Leaf	SRX11930854	PRJNA758109	(Chakraborty et al. 2022)

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58	<i>Oryza sativa</i>	Small RNA-seq	nrp(d/e)2 Rep2	Leaf	SRX119 30855	PRJNA 758109	(Chakraborty et al. 2022)
59	<i>Oryza sativa</i>	Small RNA-seq	nrp(d/e)2 Rep3	Leaf	SRX119 30856	PRJNA 758109	(Chakraborty et al. 2022)
60	<i>Arabidopsis thaliana</i>	Small RNA-seq	ago4ago6a ago9	Inflorescence	SRX1148 2427	GSE165 574	(Sigmund et al. 2021)
61	<i>Arabidopsis thaliana</i>	Small RNA-seq	drm1drm2_ Rep1	Inflorescence	SRX1148 2428	GSE165 574	(Sigmund et al. 2021)
62	<i>Arabidopsis thaliana</i>	Small RNA-seq	suvh2suvh9_ Rep1	Inflorescence	SRX1148 2429	GSE165 574	(Sigmund et al. 2021)
63	<i>Arabidopsis thaliana</i>	Small RNA-seq	suvh2suvh9_ Rep2	Inflorescence	SRX1148 2430	GSE165 574	(Sigmund et al. 2021)
64	<i>Arabidopsis thaliana</i>	Small RNA-seq	nrpe1	Inflorescence	SRX2529 61	GSE453 68	(Law et al. 2013)
65	<i>Arabidopsis thaliana</i>	Small RNA-seq	drm2	Inflorescence	SRX2529 63	GSE453 68	(Law et al. 2013)
66	<i>Arabidopsis thaliana</i>	Small RNA-seq	WT_Rep1	Inflorescence	SRX2884 335	GSE996 94	(Zhou et al. 2018)
67	<i>Arabidopsis thaliana</i>	Small RNA-seq	WT_Rep2	Inflorescence	SRX2884 336	GSE996 94	(Zhou et al. 2018)
68	<i>Arabidopsis thaliana</i>	Small RNA-seq	WT_Rep3	Inflorescence	SRX2884 337	GSE996 94	(Zhou et al. 2018)

69	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy1_R1	Inflorescence	SRX2884338	GSE99694	(Zhou et al. 2018)
70	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy2_R1	Inflorescence	SRX2884339	GSE99694	(Zhou et al. 2018)
71	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy3_R1	Inflorescence	SRX2884340	GSE99694	(Zhou et al. 2018)
72	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy4_R1	Inflorescence	SRX2884341	GSE99694	(Zhou et al. 2018)
73	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy1_2_R1	Inflorescence	SRX2884342	GSE99694	(Zhou et al. 2018)
74	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy1_3_R1	Inflorescence	SRX2884343	GSE99694	(Zhou et al. 2018)
75	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy1_4_R1	Inflorescence	SRX2884344	GSE99694	(Zhou et al. 2018)
76	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy2_3_R1	Inflorescence	SRX2884345	GSE99694	(Zhou et al. 2018)
77	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy2_4_R1	Inflorescence	SRX2884346	GSE99694	(Zhou et al. 2018)
78	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy3_4_R1	Inflorescence	SRX2884347	GSE99694	(Zhou et al. 2018)
79	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy1_2_3_4_R1	Inflorescence	SRX2884348	GSE99694	(Zhou et al. 2018)

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80	<i>Arabidopsis thaliana</i>	Small RNA-seq	clsy1_2_3_4_R2	Inflorescence	SRX2884349	GSE99694	(Zhou et al. 2018)
81	<i>Arabidopsis thaliana</i>	Small RNA-seq	shh1_R2	Inflorescence	SRX2884350	GSE99694	(Zhou et al. 2018)
82	<i>Arabidopsis thaliana</i>	Small RNA-seq	shh1clsy1_R1	Inflorescence	SRX2884351	GSE99694	(Zhou et al. 2018)
83	<i>Arabidopsis thaliana</i>	Small RNA-seq	shh1clsy1_2_R1	Inflorescence	SRX2884352	GSE99694	(Zhou et al. 2018)
84	<i>Arabidopsis thaliana</i>	Small RNA-seq	shh1clsy3_4_R1	Inflorescence	SRX2884353	GSE99694	(Zhou et al. 2018)
85	<i>Arabidopsis thaliana</i>	Small RNA-seq	nrdp1	Inflorescence	SRX2884354	GSE99694	(Zhou et al. 2018)
86	<i>Arabidopsis thaliana</i>	Small RNA-seq	drm1_2_R2	Inflorescence	SRX2884355	GSE99694	(Zhou et al. 2018)
87	<i>Arabidopsis thaliana</i>	Small RNA-seq	cmt2_R1	Inflorescence	SRX2884356	GSE99694	(Zhou et al. 2018)
88	<i>Arabidopsis thaliana</i>	Small RNA-seq	cmt3_R1	Inflorescence	SRX2884357	GSE99694	(Zhou et al. 2018)
89	<i>Arabidopsis thaliana</i>	Small RNA-seq	met1-3_rep1	Inflorescence	SRX2884360	GSE99694	(Zhou et al. 2018)
90	<i>Arabidopsis</i>	Small RNA-seq	met1-3_rep2	Inflorescence	SRX2884361	GSE99694	(Zhou et al. 2018)

	<i>thaliana</i>						
91	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>ddm1_R1</i>	Inflorescence	SRX2884362	GSE99694	(Zhou et al. 2018)
92	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>atxr56_R1</i>	Inflorescence	SRX2884363	GSE99694	(Zhou et al. 2018)
93	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>suvh4_5_6_R1</i>	Inflorescence	SRX2884364	GSE99694	(Zhou et al. 2018)
94	<i>Arabidopsis thaliana</i>	Small RNA-seq	WT Col-0	Inflorescence	SRX1672079	GSE79780	(Panda et al. 2016)
95	<i>Arabidopsis thaliana</i>	Small RNA-seq	WT Col-0	Inflorescence	SRX1672080	GSE79780	(Panda et al. 2016)
96	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nripd1</i>	Inflorescence	SRX1672081	GSE79780	(Panda et al. 2016)
97	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>rdr6 Rep1</i>	Inflorescence	SRX1672082	GSE79780	(Panda et al. 2016)
98	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>rdr6 Rep2</i>	Inflorescence	SRX1671755	GSE79780	(Panda et al. 2016)
99	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>nripd1 rdr6</i>	Inflorescence	SRX1671756	GSE79780	(Panda et al. 2016)
100	<i>Arabidopsis thaliana</i>	Small RNA-seq	<i>ddm1 rep1</i>	Inflorescence	SRX1672083	GSE79780	(Panda et al. 2016)
101	<i>Arabidopsis</i>	Small RNA-seq	<i>ddm1 rep2</i>	Inflorescence	SRX1672084	GSE79780	(Panda et al.

	<i>s thalia na</i>						2016)
102	<i>Arabi dopsi s thalia na</i>	Small RNA-seq	<i>rdr6 ddm1 rep1</i>	Inflorescence	SRX167 2087	GSE79 780	(Panda et al. 2016)
103	<i>Arabi dopsi s thalia na</i>	Small RNA-seq	<i>rdr6 ddm1 rep2</i>	Inflorescence	SRX167 1760	GSE79 780	(Panda et al. 2016)
104	<i>Arabi dopsi s thalia na</i>	Small RNA-seq	<i>nrdp1 ddm1 rep1</i>	Inflorescence	SRX167 1757	GSE79 780	(Panda et al. 2016)
105	<i>Arabi dopsi s thalia na</i>	Small RNA-seq	<i>nrdp1 ddm1 rep2</i>	Inflorescence	SRX167 1758	GSE79 780	(Panda et al. 2016)
106	<i>Arabi dopsi s thalia na</i>	Small RNA-seq	<i>nrdp1 rdr6 ddm1 rep1</i>	Inflorescence	SRX167 2088	GSE79 780	(Panda et al. 2016)
107	<i>Arabi dopsi s thalia na</i>	Small RNA-seq	<i>nrdp1 rdr6 ddm1 rep2</i>	Inflorescence	SRX167 2089	GSE79 780	(Panda et al. 2016)

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