

Supplementary Data 2. Summary of 93 *IR*-introns in rice.

Host genes ¹	Page ³	Introns ²	Page ³	Host genes ¹	Page ³	Introns ²	Page ³
LOC_Os01g01070.1	4	LOC_Os01g01070.1 intron_2	5	LOC_Os05g25770.1	97	LOC_Os05g25770.1 intron_1	98
LOC_Os01g08780.1	6	LOC_Os01g08780.1 intron_6	7	LOC_Os05g46530.1	99	LOC_Os05g46530.1 intron_1	100
LOC_Os01g23800.1	8	LOC_Os01g23800.1 intron_2	9	LOC_Os05g50810.1	101	LOC_Os05g50810.1 intron_5	102
LOC_Os01g25240.1	10	LOC_Os01g25240.1 intron_2	11	LOC_Os06g07330.1	103	LOC_Os06g07330.1 intron_2	104
LOC_Os01g43740.1	12	LOC_Os01g43740.1 intron_1	13	LOC_Os06g09320.1	105	LOC_Os06g09320.1 intron_4	106
LOC_Os01g48850.1	14	LOC_Os01g48850.1 intron_3	15	LOC_Os06g11200.1	107	LOC_Os06g11200.1 intron_1	108
LOC_Os01g49350.1	16	LOC_Os01g49350.1 intron_2	17	LOC_Os06g15900.1	109	LOC_Os06g15900.1 intron_1	110
LOC_Os01g56510.1	18	LOC_Os01g56510.1 intron_9	19	LOC_Os06g21040.1	111	LOC_Os06g21040.1 intron_1	112
LOC_Os01g66379.1	20	LOC_Os01g66379.1 intron_2	21	LOC_Os06g24010.1	113	LOC_Os06g24010.1 intron_1	114
LOC_Os01g67100.1	22	LOC_Os01g67100.1 intron_3	23	LOC_Os06g30460.1	115	LOC_Os06g30460.1 intron_19	116
LOC_Os01g68160.1	24	LOC_Os01g68160.1 intron_5	25	LOC_Os06g44180.1	117	LOC_Os06g44180.1 intron_3	118
LOC_Os02g04080.1	26	LOC_Os02g04080.1 intron_7	27	LOC_Os07g01240.1	119	LOC_Os07g01240.1 intron_5	120
LOC_Os02g07850.1	28	LOC_Os02g07850.1 intron_1	29	LOC_Os07g02780.1	121	LOC_Os07g02780.1 intron_5	122
LOC_Os02g10280.1	30	LOC_Os02g10280.1 intron_4	31	LOC_Os07g16140.1	123	LOC_Os07g16140.1 intron_6	124
LOC_Os02g12570.1	32	LOC_Os02g12570.1 intron_4	33	LOC_Os07g16960.1	125	LOC_Os07g16960.1 intron_4	126
LOC_Os02g12840.1	34	LOC_Os02g12840.1 intron_6	35	LOC_Os07g23169.1	127	LOC_Os07g23169.1 intron_6	128
LOC_Os02g28040.1	36	LOC_Os02g28040.1 intron_13	37	LOC_Os07g34030.1	129	LOC_Os07g34030.1 intron_8	130
LOC_Os02g35039.1	38	LOC_Os02g35039.1 intron_8	39	LOC_Os07g35600.1	131	LOC_Os07g35600.1 intron_2	132
LOC_Os02g40454.1	40	LOC_Os02g40454.1 intron_6	41	LOC_Os07g39830.1	133	LOC_Os07g39830.1 intron_1	134
LOC_Os02g48430.1	42	LOC_Os02g48430.1 intron_3	43	LOC_Os08g02290.1	135	LOC_Os08g02290.1 intron_1	136
LOC_Os02g50630.1	44	LOC_Os02g50630.1 intron_3	45	LOC_Os08g08030.1	137	LOC_Os08g08030.1 intron_11	138
LOC_Os02g52510.1	46	LOC_Os02g52510.1 intron_19	47	LOC_Os08g09650.1	139	LOC_Os08g09650.1 intron_2	140
LOC_Os02g53120.1	48	LOC_Os02g53120.1 intron_6	49	LOC_Os08g33488.1	141	LOC_Os08g33488.1 intron_2	142

LOC_Os02g53740.2 ⁴		LOC_Os02g53740.2 intron_3	50	LOC_Os08g37700.1	143	LOC_Os08g37700.1 intron_2	144
LOC_Os02g55210.1	51	LOC_Os02g55210.1 intron_5	52	LOC_Os09g17730.1	145	LOC_Os09g17730.1 intron_1	146
LOC_Os02g56920.1	53	LOC_Os02g56920.1 intron_7	54	LOC_Os09g23190.1	147	LOC_Os09g23190.1 intron_7	148
LOC_Os03g13614.1	55	LOC_Os03g13614.1 intron_1	56	LOC_Os09g23640.1	149	LOC_Os09g23640.1 intron_3	150
LOC_Os03g24339.1	57	LOC_Os03g24339.1 intron_2	58	LOC_Os09g29670.1	151	LOC_Os09g29670.1 intron_1	152
LOC_Os03g27640.1	59	LOC_Os03g27640.1 intron_2	60	LOC_Os09g36750.1	153	LOC_Os09g36750.1 intron_1	154
LOC_Os03g37140.1	61	LOC_Os03g37140.1 intron_3	62	LOC_Os10g04290.1	155	LOC_Os10g04290.1 intron_3	156
LOC_Os03g37411.1	63	LOC_Os03g37411.1 intron_5	64	LOC_Os10g04740.1	157	LOC_Os10g04740.1 intron_4	158
LOC_Os03g51270.1	65	LOC_Os03g51270.1 intron_3	66	LOC_Os10g18740.1	159	LOC_Os10g18740.1 intron_5	160
LOC_Os03g52560.1	67	LOC_Os03g52560.1 intron_2	68	LOC_Os10g19230.1	161	LOC_Os10g19230.1 intron_1	162
LOC_Os03g56530.1	69	LOC_Os03g56530.1 intron_3	70	LOC_Os10g29120.1	163	LOC_Os10g29120.1 intron_1	164
LOC_Os03g60279.1	71	LOC_Os03g60279.1 intron_2	72	LOC_Os10g33275.1 ⁴		LOC_Os10g33275.1 intron_7	165
LOC_Os04g23230.1	73	LOC_Os04g23230.1 intron_1	74	LOC_Os11g04120.1	166	LOC_Os11g04120.1 intron_2	167
LOC_Os04g28420.1	75	LOC_Os04g28420.1 intron_9	76	LOC_Os11g08380.1	168	LOC_Os11g08380.1 intron_3	169
LOC_Os04g35260.1	77	LOC_Os04g35260.1 intron_27	78	LOC_Os11g18240.1	170	LOC_Os11g18240.1 intron_5	171
LOC_Os04g41180.1	79	LOC_Os04g41180.1 intron_1	80	LOC_Os11g29050.1	172	LOC_Os11g29050.1 intron_2	173
LOC_Os04g47830.1	81	LOC_Os04g47830.1 intron_7	82	LOC_Os11g36679.1	174	LOC_Os11g36679.1 intron_2	175
LOC_Os04g57510.1	83	LOC_Os04g57510.1 intron_2	84	LOC_Os11g43600.1	176	LOC_Os11g43600.1 intron_7	177
LOC_Os05g03960.1	85	LOC_Os05g03960.1 intron_1	86	LOC_Os12g10910.1	178	LOC_Os12g10910.1 intron_1	179
LOC_Os05g06910.1	87	LOC_Os05g06910.1 intron_7	88	LOC_Os12g13440.1	180	LOC_Os12g13440.1 intron_1	181
LOC_Os05g06970.1	89	LOC_Os05g06970.1 intron_2	90	LOC_Os12g24550.1	182	LOC_Os12g24550.1 intron_15	183
LOC_Os05g15370.1	91	LOC_Os05g15370.1 intron_1	92	LOC_Os12g41760.1	184	LOC_Os12g41760.1 intron_1	185
LOC_Os05g18604.2	93	LOC_Os05g18604.2 intron_8	94	LOC_Os12g42810.1	186	LOC_Os12g42810.1 intron_10	187
LOC_Os05g24020.1	95	LOC_Os05g24020.1 intron_14	96				

- 1: Gene expression, sRNA transcription and DNA methylation landscapes of host genes.
- 2: Predicted secondary structures of introns.
- 3: Jump to the corresponding page to see the detailed information.
- 4: These two genes (LOC_Os02g53740.2 and LOC_Os10g33275.1) did not annotate in TIGR rice release 5.0.

Note:

- All secondary structures were predicted using RNAfold program in the Vienna RNA package (Hofacker 2003).
- sRNAs from GSM455965 dataset (the highest sequenced library of all we have collected) were highlighted with different colors (See below) according to their abundances. The first and last nucleotides of each intron were colored by red and blue background, respectively.



- The gene expression, sRNA profiling and DNA methylation of host genes were obtained from the UCSC genome browser (<http://159.226.118.31:9311/cgi-bin/hgGateway?org=Nipponbare&db=nipp>).











































































































































































































































































































































































