

Supplementary table: Prediction of BRMS1-binding miRNAs by Bioinformatics

miRNA	Position in the UTR	context++ score
miR-4485-5p	76-83	-0.58
miR-6840-3p	536-543	-0.56
miR-6885-5p	465-472	-0.55
miR-151a-5p	178-185	-0.54
miR-151b	178-185	-0.54
miR-6836-3p	449-456	-0.49
miR-345-5p	403-410	-0.46
miR-328-5p	465-472	-0.46
miR-7976	480-487	-0.45
miR-3184-5p	91-98	-0.42
miR-423-5p	91-98	-0.4
miR-4433a-3p	266-273	-0.4
miR-6859-3p	422-428	-0.37
miR-6742-3p	47-54	-0.36
miR-1205	68-75	-0.36
miR-6775-3p	365-372	-0.34
miR-6736-3p	207-214	-0.33
miR-1291	365-372	-0.33
miR-3937	250-256	-0.31
miR-6865-5p	256-262	-0.31
miR-361-3p	420-426	-0.31
miR-4728-5p	135-142	-0.3
miR-6799-5p	259-266	-0.3
miR-4722-5p	66-73	-0.29
miR-6815-5p	256-262	-0.29
miR-4433b-3p	265-271	-0.29
miR-4474-3p	322-328	-0.29

miR-149-3p	135-142	-0.28
miR-4745-5p	263-269	-0.28
miR-4459	267-273	-0.28
miR-3605-5p	327-333	-0.28
miR-874-3p	481-487	-0.28
miR-4251	503-510	-0.28
miR-6764-5p	537-543	-0.28
miR-4505	106-113	-0.27
miR-8082	143-149	-0.26
miR-4436b-3p	173-179	-0.26
miR-1233-5p	261-267	-0.26
miR-6778-5p	261-267	-0.26
miR-4481	263-269	-0.26
miR-626	306-312	-0.26
miR-4743-5p	357-363	-0.26
miR-1915-3p	537-543	-0.26
miR-6883-5p	135-142	-0.25
miR-6879-5p	173-179	-0.25
miR-6740-3p	303-310	-0.25
miR-4764-5p	325-331	-0.25
miR-5588-3p	539-545	-0.25
miR-3972	36-42	-0.24
miR-6783-3p	48-54	-0.24
miR-1343-3p	48-54	-0.24
miR-1289	162-168	-0.24
miR-765	165-171	-0.24
miR-6735-5p	173-179	-0.24
miR-6780a-5p	260-266	-0.24
miR-1273h-5p	260-266	-0.24

miR-6089	359-366	-0.24
miR-18a-3p	482-488	-0.24
miR-6730-5p	531-537	-0.24
miR-7160-3p	132-138	-0.23
miR-6785-5p	135-142	-0.23
miR-4745-5p	139-145	-0.23
miR-3616-3p	174-180	-0.23
miR-1254	220-226	-0.23
miR-4726-3p	537-543	-0.23
miR-2467-3p	170-176	-0.22
miR-3934-3p	244-250	-0.22
miR-149-3p	260-266	-0.22
miR-4768-3p	267-273	-0.22
miR-6827-5p	289-295	-0.22
miR-6876-3p	306-312	-0.22
miR-6849-3p	439-445	-0.22
miR-6720-5p	439-445	-0.22
miR-6887-5p	466-472	-0.22
miR-125b-5p	479-485	-0.22
miR-4319	479-485	-0.22
miR-125a-5p	479-485	-0.22
miR-6805-3p	29-35	-0.21
miR-1266-5p	243-249	-0.21
miR-6851-5p	258-264	-0.21
miR-7106-5p	260-266	-0.21
miR-6779-5p	260-266	-0.21
miR-3687	355-361	-0.21
miR-3166	496-502	-0.21
miR-1202	36-42	-0.2

miR-3194-5p	36-42	-0.2
miR-7-5p	60-66	-0.2
miR-3131	179-185	-0.2
miR-6757-5p	240-246	-0.2
miR-4728-5p	260-266	-0.2
miR-30b-3p	260-266	-0.2
miR-1343-5p	290-296	-0.2
miR-942-5p	301-308	-0.2
miR-324-5p	345-351	-0.2
miR-6512-3p	439-445	-0.2
miR-6795-5p	466-472	-0.2
miR-6741-5p	45-51	-0.19
miR-4459	65-71	-0.19
miR-4632-5p	173-179	-0.19
miR-7843-5p	173-179	-0.19
miR-4779	176-182	-0.19
miR-6801-5p	216-222	-0.19
miR-3116	220-226	-0.19
miR-1915-5p	223-229	-0.19
miR-7150	253-259	-0.19
miR-6134	257-263	-0.19
miR-3689a-3p	260-266	-0.19
miR-3689c	260-266	-0.19
miR-3689b-3p	260-266	-0.19
miR-3134	276-282	-0.19
miR-1225-3p	287-293	-0.19
miR-939-5p	290-296	-0.19
miR-3617-3p	335-341	-0.19
miR-8071	430-436	-0.19

miR-6829-3p	449-455	-0.19
miR-7851-3p	469-475	-0.19
miR-6765-3p	470-476	-0.19
miR-4324	478-484	-0.19
miR-3200-5p	505-511	-0.19
miR-6776-5p	46-52	-0.18
miR-3158-5p	69-75	-0.18
miR-5787	106-113	-0.18
miR-4534	143-149	-0.18
miR-4736	253-259	-0.18
miR-1207-5p	253-259	-0.18
miR-6883-5p	260-266	-0.18
miR-1273f	278-284	-0.18
miR-7106-3p	372-378	-0.18
miR-3152-5p	450-456	-0.18
miR-5691	29-35	-0.17
miR-6734-5p	92-98	-0.17
miR-4725-5p	97-103	-0.17
miR-3065-3p	123-129	-0.17
miR-6511b-5p	187-193	-0.17
miR-661	220-226	-0.17
miR-139-3p	235-241	-0.17
miR-24-3p	245-251	-0.17
miR-3689d	258-264	-0.17
miR-6798-5p	293-299	-0.17
miR-1265	326-332	-0.17
miR-596	349-355	-0.17
miR-5586-5p	440-446	-0.17
miR-6791-3p	449-455	-0.17

miR-4642	457-463	-0.17
miR-146b-3p	481-487	-0.17
miR-873-5p.2	67-73	-0.16
miR-6514-5p	142-148	-0.16
miR-4441	242-248	-0.16
miR-4763-3p	253-259	-0.16
miR-6505-3p	314-320	-0.16
miR-216a-3p	386-392	-0.16
miR-4520-3p	428-434	-0.16
miR-221-5p	459-465	-0.16
miR-331-3p	16-22	-0.15
miR-6804-5p	24-30	-0.15
miR-214-5p	74-80	-0.15
miR-4481	139-145	-0.15
miR-1825	152-158	-0.15
miR-611	179-185	-0.15
miR-6811-5p	187-193	-0.15
miR-6514-3p	221-227	-0.15
miR-6785-5p	260-266	-0.15
miR-5699-5p	285-291	-0.15
miR-6791-5p	370-376	-0.15
miR-488-5p	417-423	-0.15
miR-7109-5p	466-472	-0.15
miR-637	467-473	-0.15
miR-329-5p	528-534	-0.15
miR-3194-3p	29-35	-0.14
miR-6852-5p	48-54	-0.14
miR-4288	71-77	-0.14
miR-5194	92-98	-0.14

miR-1233-5p	137-143	-0.14
miR-6847-5p	169-175	-0.14
miR-4518	243-249	-0.14
miR-4292	370-376	-0.14
miR-892b	376-382	-0.14
miR-6745	431-437	-0.14
miR-363-5p	431-437	-0.14
miR-488-5p	445-451	-0.14
miR-6852-5p	468-474	-0.14
miR-4653-5p	27-33	-0.13
miR-939-3p	48-54	-0.13
miR-2861	88-94	-0.13
miR-6778-5p	137-143	-0.13
miR-4645-5p	158-164	-0.13
miR-6754-5p	242-248	-0.13
miR-149-5p	375-381	-0.13
miR-8073	459-465	-0.13
miR-146a-5p	476-482	-0.13
miR-146b-5p	476-482	-0.13
miR-7153-5p	476-482	-0.13
miR-1253	502-508	-0.13
miR-3921	27-33	-0.12
miR-6748-5p	83-89	-0.12
miR-6738-5p	92-98	-0.12
miR-3652	107-113	-0.12
miR-6780a-5p	136-142	-0.12
miR-8082	237-243	-0.12
miR-4270	242-248	-0.12
miR-4442	355-361	-0.12

miR-4261	381-387	-0.12
miR-3138	429-435	-0.12
miR-3173-5p	481-487	-0.12
miR-6799-3p	481-487	-0.12
miR-766-5p	63-69	-0.11
miR-4319	95-101	-0.11
miR-140-3p.1	118-124	-0.11
miR-1972	156-162	-0.11
miR-4673	158-164	-0.11
miR-4323	286-292	-0.11
miR-3191-5p	300-306	-0.11
miR-128-3p	386-392	-0.11
miR-6778-3p	449-455	-0.11
miR-589-5p	476-482	-0.11
miR-6761-5p	504-510	-0.11
miR-4421	73-79	-0.1
miR-6793-5p	83-89	-0.1
miR-134-3p	84-90	-0.1
miR-4524a-3p	233-239	-0.1
miR-617	314-320	-0.1
miR-451b	332-338	-0.1
miR-4308	370-376	-0.1
miR-3681-3p	386-392	-0.1
miR-2861	462-468	-0.1

The context++ score for a specific site has been recently developed as an improved quantitative model of canonical targeting, using a compendium of experimental datasets to minimize confounding biases. The context++ score considers site type and another 14 features to predict the most effectively targeted mRNAs, in which it drives the latest version of TargetScan (v7.0; targetscan.org), thereby providing a

valuable resource for placing miRNAs into gene-regulatory networks. Predicted targets of each miRNA family are sorted by total context++ score. The representative miRNA is the miRNA in its family with the most favorable (lowest) total context++ score.