

Supplementary Table 1

Species	m6A Writers				m6A Erasers		m6A Readers				Refs
<i>Arabidopsis thaliana</i>	AtMTA	AtFIP37	AtVIR	AtHAKAI	AtALKBH9B	AtALKBH10B	AtECT2	AtECT3	AtECT4	AtCPSF30	[7] [11]
	AtMTB AtMTC						YTHD05, YTH	YTHD08			[7] [32]
<i>Cicer arietinum</i>	CaMTA	CaFIP37 1	CaVIR1	CaHAKAI	CaALKBH3B	CaALKBH16B	AtECT2	AtECT3	AtECT4	AtCPSF30	[7]
	CaMTB	CaFIP37 2	CaVIR2		CaALKBH17B	CaECT8	CaECT6			CaECT19	[7]
	CaMTC	CaFIP37 3 CaFIP37 4	CaVIR3								[7] [7]
<i>Vitis vinifera</i>	VvMTA	VvFIP37	VvVIR	VvHAKAI	VvALKBH6B	VvALKBH10B	VvECT9	VvECT1	VvECT11	VvECT3	[7]
	VvMTB VvMTC										[7] [7]
<i>Solanum lycopersicum</i>	SIMTA SIMTB SIMTC SIMTD	SIFIP37	SIVIR	SIHAKAI	SlALKBH3B SlALKBH4B	SlALKBH10B	SlECT1	SlECT2 SlECT9		SlECT4 SlECT6	[7] [7] [7] [7]
<i>Brassica rapa</i>	BrMTA BrMTB BrMTC	BrFIP37 1 BrFIP37 2	BrVIR	BrHAKAI	BrALKBH6B	BrALKBH12B	BrECT16	BrECT1 BrECT7	BrECT14 BrECT15	BrCPSF30 - 1 BrCPSF30 - 2	[7] [7] [7]
<i>Gossypium hirsutum</i>	GhMTA GhMTB GhMTC GhMTD GhMTE	GhFIP37 1 GhFIP37 2	GhVIR1 GhVIR2 GhVIR3	GhHAKAI1 GhHAKAI2 GhHAKAI3 GhHAKAI4 GhHAKAI5	GhALKBH9B GhALKBH10B	GhALKBH11B GhALKBH23B	GhECT15 GhECT16	GhECT5 GhECT6	GhECT18 GhECT27	GhECT20 GhECT27	[7] [7] [7] [7] [7] [7]
<i>Chenopodium quinoa</i>	CqMTA CqMTB CqMTC CqMTD CqMTE CqMTF	 CqFIP37 1 CqFIP37 2	 CqVIR1 CqVIR2	 CqHAKAI1 CqHAKAI2	CqALKBH13B CqALKBH27B	CqALKBH26B	CqECT14	CqECT15	CqECT9	CqCPSF30 1 CqCPSF30 2	[7] [7] [7] [7] [7] [7]

<i>Zea mays</i>	ZmMTA ZmMTB ZmMTC	ZmFIP37 1 ZmFIP37 2 ZmFIP37 3 ZmFIP37 4 ZmFIP37 5	ZmVIR1 ZmVIR2	ZmHAKAI1 ZmHAKAI2	ZmALKBH1B	ZmALKBH5B ZmALKBH10B	ZmECT7 ZmECT23	ZmECT8	ZmECT11 ZmECT25	ZmCPSF30 1	[7]
<i>Triticum aestivum</i>	TaMTA D TaMTA A TaMTC D TaMTB A TaMTB D TaMTA B TaMTC B TaMTB B TaMTC A	TaFIP37 - 1D TaFIP37 2D TaFIP37 2A TaFIP37 - 1B	TaVIR D TaVIR A TaVIR B	TaHAKAI1 D TaHAKAI1 - A TaHAKAI1 - B TaHAKAI2 D	TaALKBH4B	TaALKBH6B TaALKBH29B	TaECT7 TaECT21	TaECT6 TaECT22	TaECT3 TaCPSF30 - 4	TaCPSF30 2 TaCPSF30 5	[7] [7] [7] [7] [7] [7] [7]
<i>Sorghum bicolor</i>	SbMTA SbMTB SbMTC	SbFIP37	SbVIR1 SbVIR2	SbHAKAI1 SbHAKAI2	SbALKBH13B SbALKBH14B	SbALKBH4B SbALKBH15B	SbCPSF30 3 SbCPSF30 4	SbCPSF30 - 1 SbCPSF30 - 2		SbCPSF30 19	[7] [7] [7]
<i>Oryza indica</i>	OiMTA OiMTB OiMTC	OiFIP37	OiVIR	OiHAKAI	OiALKBH5B	OiALKBH6B OiALKBH12B	OiECT2	OiECT10	OiECT7		[7] [7] [7]
<i>Oryza sativa</i>	MTA MTB	FIP37	VIRMA		ALKBH10B		YTHD08				[32] [32]
<i>Hordeum vulgare</i>	HvMTA	HvFIP37	HvVIR	HvHAKAI	HvALKBH1B	HvALKBH4B HvALKBH8B	HvECT2 HvECT6	HvECT4	HvECT1 HvECT8		[7] [7]
<i>Selaginella moellendorffii</i>	SmMTA SmMTB	SmFIP37	—	—	SmALKBH4B	SmALKBH14B SmALKBH16B		SmECT2 SmECT4		SmECT1 SmECT3	[7] [7]
<i>Marchantia polymorpha</i>	MapMTA MapMTB MapMTC	MapFIP37	MapVIR1 MapVIR2	MpHAKAI	MapALKBH6B	MapALKBH10B		MapECT1 MapECT2		MapECT3	[7] [7] [7]
<i>Physcomitrella patens</i>	PpMTA PpMTB PpMTC PpMTD	PpFIP37 1 PpFIP37 2	PpVIR	PpHAKAI1 PpHAKAI2 PpHAKAI3	PpALKBH5B PpALKBH6B	PpALKBH2B PpALKBH4B		PpECT1 PpECT3		PpECT4	[7] [7] [7] [7]

<i>Cyanidioschyzon merolae</i>	CmMTA CmMTB	–	–	–		CmALKBH1B				[7]
<i>Micromonas pusilla</i>	MipMTA	MipFIP37	–	–		MipALKBH4B	MipECT1		MipCPSF30 1	[7]
									MipCPSF30 - 2	[7]
<i>Emiliana huxleyi</i>	EhMTA EhMTB	EhFIP37 1 EhFIP37 2	–	–		EhALKBH21B EhALKBH18B EhALKBH24B	EhECT1			[7] [7]
	EhMTC EhMTD									[7] [7]
<i>Volvox carteri</i>	VcMTA VcMTB	VcFIP37	–	–		VcALKBH1B VcALKBH4B		VcCPSF30 1	VcECT1	[7] [7]
	VcMTC									[7]
<i>Ectocarpus siliculosus</i>	–	EsFIP37	–	–		EsALKBH2B	EsALKBH4B	EsECT1	EsECT2	[7]
							EsALKBH6B		EsCPSF30 2	[7]
<i>Chlorella variabilis</i>	CvMTA	CvFIP37	CvVIR	CvHAKAI		CvALKBH2B		CvCPSF30 1	CvECT1	[7]
	CvMTB CvMTC								CvCPSF30 3	[7] [7]
<i>Chlamydomonas reinhardtii</i>	CrMTA	CrFIP37 1	CrVIR	–		CrALKBH1B	CrALKBH2B	CrECT1	CrECT2	[7]
	CrMTB CrMTC CrMTD	CrFIP37 2 CrFIP37 3								[7] [7] [7]
Human	METTL3 METTL14 MT-A70	WTAP ALKBH5	KIAA1429/VIRM	RBM15	ZC3H13 HAKAI	H3K36me3 FTO		YT521-B/YTH YTHDF1 eIF3 IGF2BP YTHDF2 YTHDF3 YTHDC1 HNRNPA2B1 YTHDC2		[31],[33-38] [31],[33-38] [27],[29],[46] [8],[61],[65] [7],[8],[65] [8],[61],[65] [61],[65] [66] [59],[69]
Mice						ALKBH5				[7],[50-53]
<i>Saccharomyces cerevisiae</i>	Ime4	Slz1	Mum2					Pho92 Mrb1		[10], [113], [119]
<i>Schizosaccharomyces pombe</i>								YTHDF/Mmi1		[10]
<i>Plasmodium falciparum</i>	PfMT-A70 PfMT-A70.2	PfWTAP								[84]

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