油茶 *CoHMGR* 基因家族分析及启动子活性特征验证

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Analysis of *CoHMGR* Gene Family in *Camellia oleifera* and Verification of Promoter Activity Characteristics

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附表

表 1 油茶 *CoHMGR* 基因家族成员及蛋白理化性质

Table 1 Identification and physicochemical properties of *CoHMGR* family members

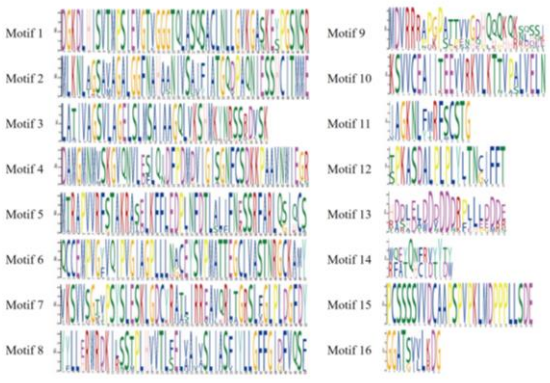
ID	蛋白名称 Protein Name	氨基酸数 Number of amino acids（aa）	分子量 Molecular weight（kD）	等电点 Theoretical pl	脂肪系数 Instability index	不稳定指数 Aliphatic index	总平均亲水系数 Grand average ofhydropathicity
A_chr01_00098	CoHMGR1-1	590	63.15	8.11	93.73	46.91	0.117
A_chr03_01153	CoHMGR2-1	472	50.9	6.95	91.99	46.47	-0.075
A_chr04_01082	CoHMGR3-1	573	61.23	8.13	95.15	38.96	0.078
A_chr06_00278	CoHMGR4-1	148	15.17	9.06	102.16	49.63	0.334
A_chr06_01617	CoHMGR4-2	247	25.61	9	95.18	63.99	0.212
A_chr09_00076	CoHMGR5-1	547	58.67	5.76	98.04	40.34	0.172
A_chr09_00220	CoHMGR5-2	543	58.18	5.76	98.05	39.4	0.169
B_chr07_01474	CoHMGR6-1	101	10.35	8.89	99.41	44.71	0.185
B_chr09_01747	CoHMGR7-1	547	58.71	5.76	98.23	39.83	0.184
B_chr09_01808	CoHMGR7-2	441	46.75	8.19	91.97	42.47	0.096
C_chr01_02317	CoHMGR8-1	583	62.51	8.11	94.19	45.71	0.099
C_chr03_02408	CoHMGR9-1	127	12.58	5.4	103.07	51.66	0.421
C_chr09_01579	CoHMGR10-1	325	36.45	5.85	87.42	46.26	-0.263

C_chr09_02273	CoHMGR10-2	441	46.75	8.19	91.97	42.47	0.096
C_chr09_02313	CoHMGR10-3	547	58.74	5.76	96.8	41.09	0.166
C_chr12_00327	CoHMGR11-1	342	37.08	8.66	81.26	39.03	-0.539

表 2 特异性引物序列

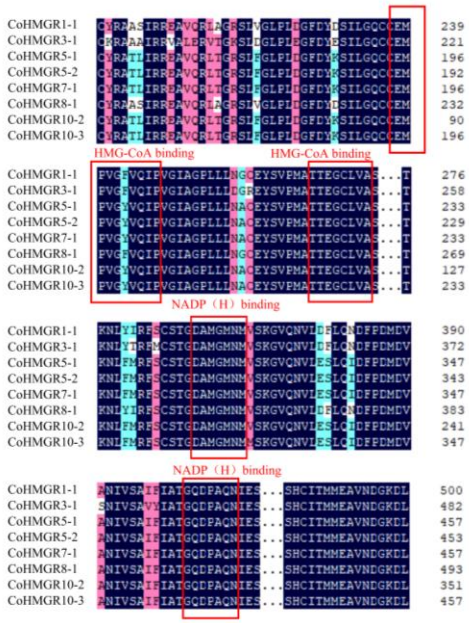
引物名称	方向	引物序列 （5′–3′）
HMGRP-F1	FORWARD	TAGAGTCGACCTGCAGGCATGCAAGCTTCTCAAAAGGACAG GATGCAATTTCT
HMGRP-F2	FORWARD	TAGAGTCGACCTGCAGGCATGCAAGCTTGTTCGGAATTACCT TTCAAACAATGACTG
HMGRP-F3	FORWARD	TAGAGTCGACCTGCAGGCATGCAAGCTTAAGGAGCATAATGA TGGAAC
HMGRP-F4	FORWARD	TAGAGTCGACCTGCAGGCATGCAAGCTTGGAGGAAAGCATG AAAAGCGCATA
HMGRP-F5	FORWARD	TAGAGTCGACCTGCAGGCATGCAAGCTTAAAGCTTCGCTTTT CCCTCCAC
HMGRP-R	REVERSE	CTCCTTTACTAGTCAGATCTACCATGGTTTTAGCCGGAATCCG GCC
qCoEF1α F	FORWARD	CAAAGAAGGGTACCAAGTGA
qCoEF1α R	REVERSE	ACCAAACAACCGACCTACGA
qCoHMGR3-1 F	FORWARD	TTGGAGTGAAGGGTGCAAAC
qCoHMGR3-1 R	REVERSE	TTTGCACCCTTCACTCCAAG

Table 2 Specific Primer Sequences



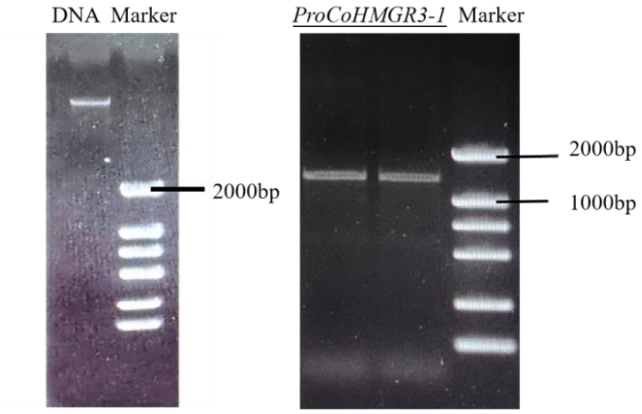
附图 1 油茶 CoHMGR 蛋白保守结构域

Figure S1 Conservative domain of *C. oleifera* CoHMGR.



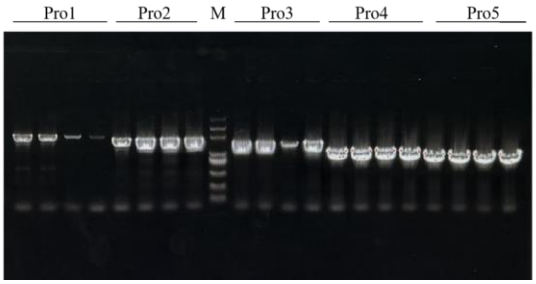
附图 2 油茶 CoHMGR 蛋白多序列比对

Figure S2 Multiple sequence alignment of CoHMGR protein from *Camellia oleifera*



附图 3 *CoHMGR3-1* 启动子克隆电泳结果

Figure S3 Electrophoresis of *CoHMGR3-1* promoter amplification



附图 4 T_1 代拟南芥阳性植株 PCR 鉴定

Figure S4 PCR identification of T_1 transgenic *A. thaliana*