

Table S1. Summary of primers used in this study.

Assay	Primer sequence		Restriction Site	
RT-qPCR		Forward primer(5'-3')	Reverse primer(5'-3')	
	<i>BrActin1</i>	CGCTTAACCCGAAAGCTAAC	TACGCCACTAGCGTAAAG	
	<i>BrOPR3</i>	CGGACCAGACCGTGTGGCATT	TCATAGGCACAAGCAAGTGAGGACA	
	<i>BrAOC3</i>	CTAACGGTCCAGATTTCTCTCC	GGGCTGTTTCTATCTCTCCGTT	
	<i>BrLOX4</i>	ATCAACAGAAGTAGCCCGTCCG	GCACATACATCGGCAATGGTTTC	
	<i>BrERF72</i>	GAACCTGATGCTTCTGCTGCGATG	TCCTCTCCTCCGTTTCTCCGTC	
	<i>BrSAG12</i>	CACTGGCGGCTTAACCACTGAA	GAAGATTGGCTGTATCCTACGGC	
	<i>BrSAG19</i>	GCAAGCGAGCGTTGGTAAAGGT	GGGTTGATCTTCCACTCCCTTC	
	<i>BrPAO1</i>	CAGCTTCAGCGACTCACC	TCGCCGTGCTTCTTCGAT	
	<i>BrPPH1</i>	TATCTGATGCGCGGTGGAT	TTCCCGACCAATGCTGGACT	
	<i>BrNYCI</i>	CGGAGACGGTGGCTAGAACG	TGCTTCTCTGAGCCACGAC	
<i>BrSGRI</i>	GTTGGGGTCCGCTTTGGGAA	AATCGAGCTAACCTGCGGGA		
Subcellular localization	<i>BrERF72-GFP-For</i>	ttctgccccaaatcgcgATGTGTGGCGGTGCTGTAATTTTC	<i>AgeI</i>	
	<i>BrERF72-GFP-Rev</i>	tagtcataccggtcgcTCCATACGACGCGATGACATCA	<i>AgeI</i>	
EMSA	<i>pGEX-4T-1-BrERF72-For</i>	ggttccgctggatccATGTGTGGCGGTGCTGTAATTTTC	<i>BamHI</i> <i>NotI</i>	
	<i>pGEX-4T-1-BrERF72-Rev</i>	agtcacgatcggcgccgTTATCCATACGACGCGATGACATCA		
	<i>EMSA -BrLOX4pro-For</i>	ACATGTTATATCCGCGCGAAGCGCGGACACCGACTCTAGTTATCAGTAAAAATAAATG		
	<i>EMSA -BrLOX4pro-Rev</i>	CATTTATTTTTACTGATAACTAGAGTCGGTGTCCGCGCTTCGCGCGGATATAACATGT		
	<i>EMSA -mLOX4pro-For</i>	ACATGTTATATCCGCGCGAAGCGCGGACAAAAATCTAGTTATCAGTAAAAATAAATG		
	<i>EMSA -mLOX4pro-Rev</i>	CATTTATTTTTACTGATAACTAGATTTTTTGTCCGCGCTTCGCGCGGATATAACATGT		
	<i>EMSA -BrAOC3pro-For</i>	ATGTCTTCACTAAAAACTATACCGACCAGAGTTTTGTAGACATAAATTACGAA		
	<i>EMSA -BrAOC3pro-Rev</i>	TTCGTAATTTATGTCTACAAAACCTCTGGTCCGTATAGTGTTTTATAGTAAGACAT		
	<i>EMSA -mBrAOC3pro-For</i>	ATGTCTTCACTAAAAACTATAAAAAACAGAGTTTTGTAGACATAAATTACGAA		
	<i>EMSA -mBrAOC3pro-Rev</i>	TTCGTAATTTATGTCTACAAAACCTCTGTTTTTATAGTGTTTTATAGTAAGACAT		
	<i>EMSA -BrOPR3pro-For</i>	CCTGAACCAATCATAGCCTGGCGGCTAAGTCTTACAGTTGA		
	<i>EMSA -BrOPR3pro-Rev</i>	TCAACTGTAAGACTTAGCCGCCAGGCTATGATTGGTTCAGG		
<i>EMSA -mBrOPR3pro-For</i>	CCTGAACCAATCATAGCCTAAAAATAAGTCTTACAGTTGA			
<i>EMSA -mBrOPR3pro-Rev</i>	TCAACTGTAAGACTTATTTTTTAGGCTATGATTGGTTCAGG			
Dual LUC assay	<i>pBD-BrERF72-For</i>	tcgccgaccgtagcctATGTGTGGCGGTGCTGTAATTTTC	<i>Stu I</i>	
	<i>pBD-BrERF72-Rev</i>	aaccagagtaaagccctTCCATACGACGCGATGACATCA	<i>Stu I</i>	
	<i>pEAQ-BrERF72-For</i>	caaattcggaccggtATGTGTGGCGGTGCTGTAATTTTC	<i>AgeI</i>	
	<i>pEAQ -BrERF72-Rev</i>	agtaaagcctcagTTATCCATACGACGCGATGACATCA	<i>XhoI</i>	
	<i>0800-BrOPR3pro-For</i>	tataggcgcaattggTGGGCTTGTATGGTTTGGGCC	<i>KpnI</i>	
	<i>0800-BrOPR3pro-Rev</i>	ttggcgtctccatggGAATTTCTGTGATCTTTTTCTCTCA	<i>NcoI</i>	
	<i>0800-BrLOX4pro-For</i>	tataggcgcaattggTACCTAGCTGGACTTATTGTGGCGAC	<i>KpnI</i>	
	<i>0800-BrLOX4pro-Rev</i>	ttggcgtctccatggTCCACAAATGAATAAACTGTTGCAA	<i>NcoI</i>	
	<i>0800-BrAOC3pro-For</i>	tataggcgcaattggAGGCAGTCAAACAATGTGTGTGTTCA	<i>KpnI</i>	
	<i>0800-BrAOC3pro-Rev</i>	ttggcgtctccatggTTTATTTCTGATGTTAAGGGAAGAC	<i>NcoI</i>	
Transcription activation	<i>pGBKT7-BrERF72-For</i>	catggaggccgaattcATGTGTGGCGGTGCTGTAATTTTC	<i>EcoR I</i>	
	<i>pGBKT7-BrERF72-Rev</i>	gccgctgcaggtcgagTTATCCATACGACGCGATGACATCA	<i>Sall</i>	

Text S1. Promoter nucleotide sequences of *BrOPR3*, *BrLOX4* and *BrAOC3*. GCC-box GCCGCC or DRE element A/GCCGAC is marked by red and boxed. Translation start site (ATG) was shown in yellow box.

BrLOX4 (NW_008711256.1) promoter

TCGGCTGGAAGCTAAATCGGCTGGCAGCTTTTTGGTCAAACAACCTCTGAAGGAAAAGCAGACGAAGCCACATTA
AAGTCCTTATAGAAATGATGGATGCCAACAATTGCCTTGCAAAGGTTTTTAGACGGGTTTCGAGAACGCTATGAGGC
AACTCTGAACAAGATTTTACAGTCTCATATCTGATAAAGGGAATGGCAAACAATATGACTTACCTCAATCAAATGA
GGTAGCTGGACTTATTGTTGGCGACATGTCAGACACTATCTGTGAGAGAGATATAGTCGTCCAGTTTCAGTCAACTA
ATTTGAAGGAGATACGAGATGATCATCCGCTATACATGAACCTCCAGTTCCCACTTTTATTCTCTTATGGTGATTATG
GTTTCAATACTGAAATCCTTTTGCATTTAGAGGAAGGAAGCTCGAGGACAAGAAAATTTCTCAGTATCCGATAATTT
TATGCTTCCCAAATACAAACGCGGTTAAAAAAAAGAATAACACTCATTAAATCTGGACAATTTTGTACTTAATTA
ACATGTTATATCCGCGCGAAGCGCGGACACCGACCTAGTTATCAGTAAAAATAAATGAAAAGTTTAAAGCTGAACA
TGTCCGTATTATTCAGAAAATCTAAGACTTGTTTTTTAAAAATCAGCGTACTTAGGTAAACTATGAATATTCCAATTA
AAAAACGTGTGGACTGAGAATAAGCTTCTCTCTCCCTAAGCTAAAGCATATAAATAGCTGTGCCTGCACATTAT
TTGTAATCAGAACGCACTAACAAAAGCTCTCAACTTCTTCTTGAAGCTTTAACCTTTTTCTGCAATCTCTTATCAC
TTCCAAGAAACAAAACCCTCAGATTCAATCATTAGTTTGTACTAATTAATTCATTTGTGGAATG

BrAOC3 (NW_008711386.1) promoter

AGGCAGTCAAACAATGTGTTGTTCAAATCCGTTCTATCAGATCTGAACATTTTCATAAATATTGTTTGGAGAAAAA
TTATGTGGGTTAACTACTTTCCTTCGAAATTCGATTCTATCAAATAATTTACTACTAATAATGATGTCTCATCATTGTG
AATTAGAACCTCAACATTTTCAATTTATAACGATGTTTCAACAAAAATGATACTTATATTTTCGTAGTAGCAGAAATTA
ATGTTTAGAATATTTCCAATAGTTTCAATTTTAAAAACGTAGAATAATTGTATAGTAGAGTTAAATTTTACTTTGAT
GATATTCTACTTTAAAATAAAAATAGAATGATGAATAAAAAATAATGAATTATTTTATTTATAGAATAAACTTAGTTT
TTACTATATATCGAGTGAAAAATAGAATATCATTAAAACATTTTACTTTAAATTATATTTTAGAAGAAAAAATATAT
TGAAATTAGAAATGCTCTTATAGCTACGTCTTGTTCGACTATACCAACTAGTCACAAAGAAATATTTTACATCGCTGA
AATATTTAAAGTTTTGTGACATACGACTGATCACTATGACTACTTGTAGAAACATGCCAATGAACAATATTTGGTTAT
TAGTTGCAATGAACAAAAAATTAACACAACCTGAACAAAGTTACTAATGTCTTCACTAAAAACACTATACCGAC
AGTTTTGTAGACATAAATTACGAAACGTATATCTTTTGCCTGTTTTGGTATCTTTCCATTACTTGGAGATCTCGTACTC
TACTCTCTACGTAATGACTCGTTTTTTCAGTCAATTTCTCAAGCTTTCGCTTTTGAACCCGTCATGGGAAACCGAGTCG
AAATTTACCAAAGCCATCTTTTCAATTTAGAAACCGGCCACTTTCTAAATATACGCACGTGCAAGTTACATCATCCCC
GCATCCGTAGACTAAACACACTCATTATATAAACAAGATCTCCCAATCTCTACTCTCATAATCAATCAAACCAAGTT
CCAAGTCTTCCCTAACATACGAAATAAATG

BrOPR3 (NW_008711256.1) promoter

TGGGCTTGATGGTTTGGGCGCGGGCCGTTTATAGCATTTAGACTGTAGCCGGTTTGGCTTATGGGCTTCGTGCCT
TTTTGTTTATGCGTTTGGGCTTCAGACTATGTAATTAGGCTTGGCCCGGTTATTATTAATCTAAATAAAATCTTGAC
GGAAAAAAGAAATGTCACACATGTACAATATGTACAAGGATCTTTTTTGAATAAGCAAGAAACAGC
TAGACAGATACATACCTCCGGTCCCACCTGAACCAATCATAGCCTGGCGCTTAAGTCTTACAGTTGAATTGTTTCATG
GGTTGTCCATATGGTGATGTGAACCATACACATTACACTAAATACTGATAAAAAAGGATACCAACTCTTCTATTTCGA
CTTATGTTTTTTCGGTCTTGAATTTCTAAATCAGTTACTCTAAATCAACAACCTTATGTTTTTCAAATCTGAACTTTTATG
TTACTCTAAATCTTCTATTTCGAGCATTTCATTTCAGTCTCAATCCCGTTATGTATGATGCTATCTTTCTTTCCCTTTTAC
TCGAACACCTTAACTTTTGTCTGTCGGTGGTCAAAGTTGGACAAAGTCAATCCAATATTTTCTTTTAAATTATTA
AAATTATATGAGGCCATTAAAGTTTTGTTCTGTAATTATTCTCTAAAGTTCGAATCTCAACTGTAGGACGGAGTAA
GAAAGAAACGAGCATTATTGTGGTTAAGTTCAAAGTGGTGGTTACTCTCTAATGTCGTCAATGCATACGTCATGTAA
ATGCAAGTGGATGGGGTCCACGGATGCATGCGTCTCAATGACGTCCACGTCCAAAGAAAAAACTTACTTTCCCTAA
TATGTATATCTAACCAATGTGTATATTTGAACAAAAAACCCTAATGTGTATATATATATGTCGCAGATATAAC
CATCTTCGTCCACAACCTACCAAAAACCTTGAAGTGTTTTGGAGAGAAAAAGAATCACAGAAATTC