

Exon 1 (85bp)

1 GGGACAGCAGGTAGGGTGGCGACGGGGGCTTCTCGCGCACTGGCGGGGCGGGCAGCGCTGTGAGGGGCGGCGCTGCGGCGGGCAGG 90

Exon 2 (174bp)

91 AAGATCGGATACTTCTCATAACAAGACCTTGAGCTGCATCTCAGCTCCTGCACATTTAGGATCCTGTGAACTGGCAAAGAAGCACAGACCA 180
181 TTTGGCTGAGTATTTCTGCAGACTCCTTTCTCATCTGTGCTTGAAGTGGCACAGCTTGCTCAAAACAATAGCCGTAGGTCAGATTTGG 270

Exon 3 (169bp)

271 AGGTGCTTGTGTGCTGGTTACATAGAAGGCCAGTTCAGATGTACACAAAACCAGATTTGCCTCGGTGGCCCCAGTGGCAGCTTAAACCAC 360
361 AGAGCTGTGCTTCAGACATGATGTGTGCCAGTTTTTCCCTTAGACAACCTTGGTGTGCGGTGAAAAGCTTCTAACACAGAAAAACCTAG 450

Exon 4 (88bp)

451 GTTGAAGGGACCTCTGGTGGTCATCTCGTCTGATCTCCTGTTCAAAGCATGTTCAATTGAATCAGGTGC AAAATGTCTGCCTGAGGCT 540
M S A L R L

Exon 5 (134bp)

541 GATTTCTAACAGAACCTCCCAGCAGGCCCTTGTCTAACTCTGATTACACCTGGGAGTATGAGTACTATGAGTATGGACCAGTGTCAATTTGA 630
I S N R T S Q Q A L S N S D Y T W E Y E Y Y E Y G P V S F E

Exon 6 (100bp)

631 AGGCCTGAAGGCTCATAAATATTCATTGTGATTGGATTTTGGGTTGGCCTTGCAGTTTTTGTTCATCTTCATGTTCTTTGCTCCTGACCCT 720
G L K A H K Y S I V I G F W V G L A V F V I F M F F V L T L
721 GCTGACAAAGACAGGAGCACCACATCAAGAAAATACAGAATCTTCTGAAAAAAGATTTTCGGATGAATAGCTTCGTGGCGGATTTTGGGAAG 810
L T K T G A P H Q E N T E S S E K R F R M N S F V A D F G R

Exon 7 (585bp)

811 ACCTCTGGAGTCGGAGAGGGTCTTTTCTCGTCAAATAGCTGAAGAGTCTCGGTCACTTTTCCATTCTGCATTAATGAAGTGAACACCT 900
P L E S E R V F S R Q I A E E S R S L F H F C I N E V E H L
901 CGACAAAGCGCAACAAAGTCAGAAAGGTCGGATCTGGAGAGTAATATCCACTTCCAGGAAGTTCCAGAAGCAGTGAACGTTAGAGGA 990
D K A Q Q S Q K G P D L E S N I H F Q E V S R S S G T L E E
991 GGACCTAAATGTCTTGCAAATAACAACATTCCTAACTTCGTGAACCGGAGCAGAATCTTTCGCTAGGTGAGGGTGATCTGCTCATCTT 1080
D L N C L A K Y N I P N F V N T E Q N S S L G E G D L L I L
1081 gCAGCCACCCAGAGTTTTAGAAAGCAAACGGCCATGCAATCTTCTCATCGGATCCTTGACTGAAAAATTCCTTAAGGTA AAAATTCCTGT 1170
Q P P R V L E S K T A M Q S S H R I L D *
1171 TTTTGTCCGGTTGGAAGCCCTTCTCCACCTTCTGCCTTATTTGGTAGAAGGTATTTTCAGGCATGTGCTTTTTTTTATTGTACGTAAGAAT 1260

1261 GGCTGTGCTGACAGAACAGTCCACGTGATAATTA AACACTAAATGC AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1335

Supplementary Figure S1 The nucleotide and amino acid sequence of the chicken MRAP2 cloned from chicken brain (5'UTR: KX447647; coding region: KT183012). Chicken MRAP2 consists of 7 exons, including 4 non-coding exons (exons 1-4) upstream ATG codon. Arrow heads indicate the exon boundary. Number in the bracket indicates the exon size (bp).