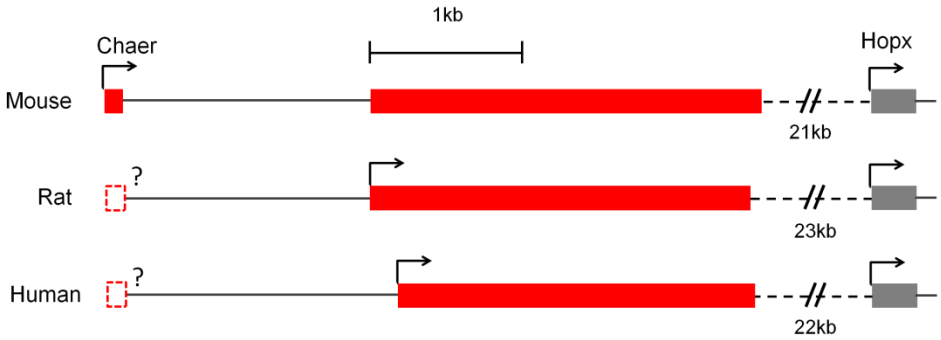
***Chaer* sequence information in mouse, rat and human:**



(functional motifs were highlighted)

> mouse Chaer 2737 bp

GGTGGAGCCAGGGGGAGGGACGAGGTGGGGTGGGGGTGGGGCTGCTAGGAAAGCACTGTG
GAATTCAGAGTGAGGAGGGACTGGAGGGAGCTGGGTCTCCATTCTGCATTTACTGGGGCC
TCACGGAGTGCAGACTCGGTATTCCATCGGGCAGTTCTCGGTAATCTGGTAACACGTGTC
CGATGCCAGTTCCAGTTCTCTGGTTGAATCTGATAGGTACAGATCCCAAACCCATGTTGG
ACATGGTGTGGGCAGGATAACCTGGCAGGCCTGGGAGTCAAATGAAGAGAGGAGCTGAGG
GCTGCTGCAAAAGTCTCAGGATGGCTGACTTGTCTCCTTCTGAAGTTTCTAGACTTGACT
CTGACACAAAGGCCTTTGGGAGAACAGACTCAAGGGACAAGGGGTGATGCTTCGCTTCCC
TCATTGGAGCCCCTTTCAGAGGGGAAAACTCACAGGCAGGAACCTGCGTGCCAGCCCTGA
CCCAGAGCAACAGTGAACAGTCCCCGCTGTGTTCCACAGCGCTCATCCAGAAACACTGCG
GGGTTTCCATCACATTCTGCAGTCCACAGGAAACCTGGAAGCTGAGTCTTTTTCTTCTGT
GATCTCTGCCTCCCCTGCTGGCCTGTGCTCTATGGGAGCTCATTAGCTGAACCCCAGGAC
CAAGGACAAGCAAGCAGGGCTGAATAGAGACTTTATGAACAGCTGCTACTCCGTGGTGTT
GTCTCCTTGTGAAGAAAGGGGTGAGCCTGGAAGTAGAAAGCAGGGGATTTGGTTTTGTTA
TTGCGTAATCTTCCTGGAAGGCGGGCGAGGGGGGTGGTAAGAAGAGCATTTGTCACTTGA
ACTGTCTGCTTGGGACAGTATTCCCTGACCCCTTTCCAGGACTTCCATAACTTGGCACTG
AGTTGGCCCTTAAGTTGGCAAACAAACCTTGGCACTGAGCAACACTTAAGAGGTAGAAAG
AATGTTTTCATGCCTTCAGCAGCTCCAGCAGACTCTGAAGGCTGAGCGGTAGCAGTTCTA
TCGCCTGCCATCCAGCCCCAGAGTAGAAGGGTCCGGCATCTCCAGCCAGGTAGCCTGTAT
GTCAGGCTCACATAGGCTATGTATGGCATCTCCATCTCGGGAGAACAAGCGTTGATGCTT
CAGTTCTGGCCTCGTCATTACCAATGTCCTTCAATGGTCCCTCTTTACTCTGAGGGGAGC
AGAAAAGGGGGTCTCATTTGGATGCCATGAGATAAGCTAATTTCTAGAACCTTCTCTATC
TTCTGTCAGTTCTAGTTTGGATTAGCGATTAGCTGTCAGAACCAGACAGACAACTCTACT
CAGACAAGTACCAGATGGGGAGCGCTGAGTCCTCGGGTGCCGAAGGGACCTCAGATGATT
CCTACAGGGCCTGTGCTTTCTTCCCCTGCTTAGAGAACAGCACATAGGTCCTTAGCGGCT
TGCACATAAACATAAATGAAAGATCTTTAGCCCCATAAGAAAGAAAAAATAAACAAAAAA
CCCTGAGCAGCCTGGTTTGGGATAAAAACATGCAGTGTACATGATTTTTGTAAAAATTAA
CTTTGGCCAGAGCACTTGGGAAGCAAGCAGCATCTAAGCTGAGACAGGCAGTCATGCCTG
AAAACCTGTCTAGTTGACAAGCATATGCAAATGAGGAAAGAGGGAGGCCTCCCTGGTCCT
AGTCAGCAGGCTAGGCTGACGGCCATGACAGGCTTCAAACTGACAGTTAAGGAGACTAGG
CCTAAACCTCTGTTTCCAAGACCTGGGAAATTCTTGGCGAGTCCAGGCCTGCCTCAGAAG
GTGCCCCACCACCTGGCCTGAGGCAAGGACAATGGATGAGTCAGCTGCAGTTTCCAGATC
GACTCCCCCTAGCAAGTTTCCAGCCCCTCACACCTCAGTAATGGAATGTCTATAGAGATG
GACCCAACAGATTAACGTAGAGGTCACCTACCCCAGAATTCCCTAATGTGCTTTAAATCA
GGCCTGTAAGCTCACTTGGTTGACTCTCTCTGTTCTGGTAATGGGAGAGCCCAGCATGCT
GGACTACAGAATAAAACACTCTTTGTGTCTATATACTATTCAAGTCCGGGCTTTCGTTCT
TTGTGGAAATATGGACCCTTACAGTAGGAAGGAGGTAGCCTAGCATGGTGTGAGGTACTG
GGACAGAGCAAAGAGTCTTCCAGAGAAGAGGGTGAGAAGAGACTCTTGGCTCCATGAAAA
AGCTAAAGCCAGCAAGAACATAAGGCGGGAACTTGAACAGTGTCAGAGCTGTGAGCTGAT
CTGTGGGGTTTCTGCCCCTGGCTAGTGACGTAGCCCGGAGGAGTCCTTGCCACCCATGCC
TTCGGGTAGAGGAGGAGTAGGATTTGCAGAGCGTTCAGAGCTTCATCCTGGTACCAAGGC
CCTTACCCACAGCTTTGCGGTGCTTGTCATTATGTACCCACAGTAAACCACAATCCAAAA
GTATCAAATGGGAAACTCTAAAAATAAATAACTCAAGAACTTGACATTGCGGCCTCTGTC
AGGAACTCTGCTCCCATCAGCTCCCTCTGACTCCCGGATGGGAATTATTCCCTCGTGCAG
TATAACCTCACCCTGCCCATCAGCGCTTACTTCGTTCCCAGCCGTTTCAGCTCTCAGGCC
TACTGTGGGGTTACAGTAATCTAGATCCACATTATGTTTATGTTGTTGATCTTGAGTTGT
GCTTAATTTTACTTATTAAACTTATTCTTACTATGGG

> Rat Chaer 2661 bp

CATTTGCAGGGGCCTCACGGAGTGCAGACTCGGTGTTACATCAGGCAGTTCTCCATAATC
TGGTAGCCCATGTCTGACGCCAATTCTGGTTCTCTGAATCTGATAGGTGCAGATCCCAAA
CTGATCTTGAACATGGTGTGGGCAGGATCACCTAGCAGGCTGAAAGTCATGTGAAGAGAA
GAGCGGAGGGTTTGTTGCAAAGTCTCAGGATGGCTAACTTGTCTCCTTCCGAGGCTTCTA
GAAATGGCTCTGACACAAAGGCCTTTGGGAGAGCAGGCTCAAGTGACAAGAGACCCTTCT
CTCATTTGAGCCCCATTCAGAGGGGGACACCCACAGGCAGGAACATGTGTGCCAGCCCTG
ACCAGAGCAACAGTGAACAGTCACTGCTGTGTTTGACAGCATCCATCCAGAAACACTTGT
GGTTTTCCATCACATTCTAGAATCCACAGGAGACCTGGAAGCTGACTCTTTCTCTTCTGT
GATCTCCGCCTCCCCTGCTGGCCTGTGCTCTGTGGGAACTCATTAGCTGAACCCTGGACA
AGGACAAGCAAGCAGGGCTGAAAAGAGACTTTATGAACAACTGTGGTCTGCTGTCTCCTT
GTGAAGAAACCTGAACTAGAAAGCAGGGAGTTTGGCTTTGTTATTGTTATTCCTGGAAGG
GATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTAGGGGGGTAATAACAGCAT
TTGTCACTTTTACTGCCTGGTTGTGATAGTAGTCCCTGACCCCTTTCCAGGACTTCCATA
ACTTGGCTCAGAGTTGGCCCTTAGATTGGCAAACCAAAGTTGGCACTGAGCAACACATAA
GAAGTAGAAAGAATTTTTTCATGACTTCAGCAGCTCCAACAGACTCTGAAGGGAGAGAGG
TACCAGTCCTATTGCTTACCATCCAGTCCCAGAGCAGCAGGGTCCTTAGACCTGCATCTC
AAGCCAGGTAGCCTGCACATCAGACTCACACAGGATATGGGATCTCCATCTTGGGAGAAC
AGCATTGATGCTTCAGCTCTGGCCTAGTCATTGCCAATGTCCATTGACGGTTCATCTTCA
CTCTGAGGGGAGCAGAAAAAGGGGGGTCTCATTCGGATGCTAAGAGATGACAAATTTCTA
GAACCTTCTCTCTCTTCTGTCAATTCTAGCTTGGATGAGCAATTAGCAGTCAGAAGCAGA
CGACTCTACTCAGACAAGTTCCAGAAGGTGAGAGCCGGGTCCTTGATGCCAAAGGAACCT
CAGACGATTCCTGCCGGGTCTGCGTTTCCTTCCCTTGCTTAGATAACAGCACATGGGTCC
TTAGGAGCTTGCACATAAAAATAAATGAAAGATTTTTGTTTACCCTCATCTATCTTTAGC
CCCATAGGAAAGAAAAAAACAAGCAAACAAAATAGGCCTGGGCAGTCTGGTTTGGAATAA
AAACACAAGCGGTGTACACGATTTTTGTAAAAATTAACTTTGGCTAAAGCATTTCGGAAG
TCAGCAGCATCTAAGCTTAGTCAGGCAGATTCATGGGTGAAAGCCTGTGTAGTTGACAAG
CGTTTGCAGATGAGAAAAGAGAGAAGTCTCTGTAGTCCTAGTGAGAAGCCTTGGCTGACT
CCATGACAGGCTTCAAACTGGCAGTTCAGGAGACTAGGCCTAAATCTCTTTTTCCAAGAA
CTGGACAATTCCAGGCTAGTTCAGGCCTCAGAAGCTTCCCTGCCATCTGGCCTGAGGCAA
GGACAATGGGGTCAGCAGCCATTTCCAGACTTCCTCAGCTACTTCCTCAGCGGCAGTTTC
CAGACCTCCCCAGCAAGTTTCCAGCCCCCACACTTCAGTAATGGATGTCGGTAGAGATGG
ACCCAACAGATTAACATAGACGTCATCTACCCTGGAATTCCCTAACGTGCTTTAATTCAG
GCCTGCAAGCTCTCTTGGTGACTCTCTATTCTGGTAACGGGAAACCGCAGCACGCTGGAC
TTCTACAGAATAAAACACTTTGTGGTTATATACTATTTAAGTCCGGGTATCATTCTTCAG
TGAATCATGGACCCTTACACTAGGAAGGAGATATCCCAGCACAGTGTAAGGTATTGGAAC
AGAACAGAGTCTCCCAGAGAGGAGGGCCAGAAGAGACTCCTGGCTCCATGAAAAAACTAA
AGATGGCAAGAACACAAGGCAGGAACTTGGACAGTATCAGAGCTGCGAGCTGTTCTGAAG
GGTTTCTGCCCCTGGTTACTGACATAGCCTACAGGAGTTCTTCCACCTATGCCTTTGAGT
AGAGGAGGTGTAGGATCTGCAGAACATCCAGAGCCTTGTTCTGGAACAAAAGCTCTAACC
CACAGCTGTGTGGTGCTTGCAGTTATGTACCCACAGTAAACCACAGTCCAAAAGTATTAA
ATGGAAAACTCTAAAAATAAATAACCCATGGTCTTTAAATTGCAGCCTGTGTCGGGAACT
CTGGTCCCATCAGCTCCCTCTGGCCCCTGCATGTGAACTGTTCCCTCAAGCAGTCTACCC
CATCCCTGCACATTAGCCCTGGTTTCCTTCCCAGCCATTTCACTCTCAGGCCCGCTGTGG
TGGCACAGTAATTTAGATCTACATTAAGTTTATGTTGTTGGTCTTGAGCTGGGCTTAATT
TATGAATTAAACTTATTCTTA

> Human Chaer 1787 bp

AACTAAATCAAATGGAAACACTTCAGCTATGACAGGAACTACACTCGTCATTTACATAGA
ATGTACACCAAATACATAACTTTGTAACCTCACTTTAGCCTCTTCATTTACATAGGGCGT
ACACCAAGTAACCAATGGAAACCTCTAGATGGTATTTAAACCCCAGAAAATTCTGTAACC
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TAAATCTCTGCTTTTGTTGCTTCATTCTTTCCTTGGTTTGTTTGTGTGTTTTGTCCAATT
CTTCGTTCAAGATGCCAAGAACCTGGACACCCCCAACTGGTAACATATGTAGGGCAATTC
CTCTTAATATGACTCTCCTACTGGTTCAGTTTCTCTGGTTGAACCCTGACTGATACATCC
TGAATAAGTTTGAATGTGGAGCTGACCGGCTAAGCTAGTGTATTGGAAGTGGGATGTGAG
AAAGTGGAGTCCAGGATGATGCCAAAGTTTTTGCCCCGAGCAGCCAGAAGGATGGCTTAG
GTATCTCCTTCTAAGGTAGGAATCACGAATGCAAAAGCCACCTACAAAAGCCTGTTCAAG
GGATGGCAAAGGAAGATGCCCAGTTTCCCCCAAGGAAGCCCTTTCAGACGGGGGATGTGT
ATAGGCAGGAATGGGTTGGAGTGGCTGGCCAGCCCTGATGTGGGCAAGCTCCAATTTAAG
GGGGTGAAATAGGTAATAAAGTCACTGCTGTGCTCCATGCCACTCATCCAGAAACACTAG
TGGTTTTCCAGTGCATTCTGGAATCCTCAGGAAATCTGGAGATCTTTTTACTGTTCTCTG
CTGTGAACCCCACCTCCCCTGCTGCTGTGTGCTCTGGGAATGAGTTAGCTGAACCCTGAG
CCAAAAACCAACAAGGAGTGCTGAATAGAGACTTTATGGAGTTGCTCTGTGGGCTTTTTT
TCTTGTGAAGGAACAGGGTGTGCTTGAAAGTAAAAAGTGAGTTATTTGGTGTTGTTGTTG
TTGTTATTGTTGTTTAAATCTTCCTGGAAGGCAGAAAGAAAGAGATAAAAAGGAAAAAAC
AGCATTTGTCACTTATAGTGCTCTGGTTAGCACAGTAGCTGGGCCCCTGAACCCTCTACA
GGCCTCCCAAGCTGGCACTGAATAAAATGTGAGAAATGAAAGGAACTTTTCCGTGAGTCT
GGCAGCGCCGACAGACACTGAGGTGGCAGAGCTGTCTGGTCCCAGTCCACATGCAGAGGC
CTGCAGCTCCTCCTTCCAGCCCGCACCCACCAGAGCTTCTCAGACGGGCCGTGTCCTGAG
AAGGTTGTTGCCAATGTAGATGTTTGAGAGGCTCACTGATGAACAAATCAACAGAGCAGA
TTTAATCTGAAGAGATCCAAATATTGTGCTTCTTTGGACTCATAGAAATGGCGAAAGATT
TAACATCAGGAAGTACTTAAGTCAGCTAATTTCTAGAGCCTTCTTCCTCCCTGTCACTTG
ATTCTAGATAGGATCACCAGTTAGACATCAGAACCAGATCTTTTTATCCAGAGAAGTACC
AGTTTGTTGTTTTTCCTTCCGAAGCCAAGTCCTCGAGTTTCAGGTAGACTTCAGTTGATT
TCTGCGAGGTCTTTGCTTTCTCTCTGCCAGAATAATCACTGCTGAGGTAACTGCAGACAA
GGTCCTTAGCACCTTAGATCAGTATAGGAAAGAAAATGAAAAATGTTTGTCTCACCTCTT
TTTGCTGCTGATCTCTACAGGAAAGCAAAAAGCCCCGAAGAGCCTGGC