

S4 Table. List of plasmids and primers used in the Matchmaker® Gold Yeast Two-Hybrid System.

Plasmids		Relevant features
pGBKT7 DNA-BD	plasmid encoding the yeast Gal4 DNA-binding domain	
pGADT7 AD	plasmid encoding the yeast Gal4 activation domain	
pGBKT7-53	Plasmid use for positive control of protein interaction	
pGADT7-T	Plasmid use for positive control of protein interaction	
pGBKT7-Lam	Plasmid use for negative control of protein interaction	
pGBKT7+MP181-MP182	pGBKT7 plasmid containing HD1 gene (short version) ¹ cloned in frame with the GAL4 DNA-BD	
pGBKT7+MP181-MP183	pGBKT7 plasmid containing HD1 gene cloned in frame with the GAL4 DNA-BD	
pGBKT7+MP184-MP185	pGBKT7 plasmid containing HD2 gene (short version) ¹ cloned in frame with the GAL4 DNA-BD	
pGBKT7+MP184-MP186	pGBKT7 plasmid containing HD2 gene cloned in frame with the GAL4 DNA-BD	
pGADT7+MP187-MP188	pGADT7 plasmid containing HD1 gene (short version) ¹ cloned in frame with the GAL4 activation domain	
pGADT7+MP189-MP190	pGADT7 plasmid containing HD2 gene (short version) ¹ cloned in frame with the GAL4 activation domain	
Primers (5'-3')		Relevant information
MP181- CATCATGGAGGAGCAGAAGCTGATCTCAGAGGAGGACCTGATGGAACCGAGTCCGGCG	Amplifies fragment comprising the complete N-terminal and homeodomain regions of the HD1 gene plus a tail of 40 bp at both 5 ² and 3 ³ ends (complementary to the pGBKT7 plasmid)	
MP182- TCAAGACCCGTTTAGAGGCCCAAGGGGTTATGCTAGTTACATCCAGCCGCTGCGACG		
MP183- TCAAGACCCGTTTAGAGGCCCAAGGGGTTATGCTAGTTATTAGCAGTCGAATACTTCGCC	With MP181 primer, amplifies fragment comprising the complete HD1 gene plus a tail of 40 bp at both 5 ² and 3 ³ ends (complementary to the pGBKT7 plasmid)	
MP184- CATCATGGAGGAGCAGAAGCTGATCTCAGAGGAGGACCTGATGTATAGCTTACCAAGTTGCC	Amplifies fragment comprising the complete N-terminal and homeodomain regions of the HD2 gene plus a tail of 40 bp at both 5 ² and 3 ³ ends (complementary to the pGBKT7 plasmid)	
MP185- TCAAGACCCGTTTAGAGGCCCAAGGGGTTATGCTAGTTAAGAGCCCGATTACGGCG		
MP186- TCAAGACCCGTTTAGAGGCCCAAGGGGTTATGCTAGTTATTATTCGCCGTTGTCATGTCAGG	With MP184 primer, amplifies fragment comprising the complete HD2 gene plus a tail of 40 bp at both 5 ² and 3 ³ ends (complementary to the pGBKT7 plasmid)	
MP187- CGCCGCCATGGAGTACCCATACGACGTACCAGATTACGCTATGGAACCGAGTCCGGCG	Amplifies fragment comprising the complete N-terminal and homeodomain regions of the HD1 gene plus a tail of 40 bp at both 5 ⁴ and 3 ⁵ ends (complementary to the pGADT7 plasmid)	
MP188- TTGAAGTGAACCTGCGGGTTTTTCAGTATCTACGATTCACATCCAGCCGCTGCGACG		
MP189- CGCCGCCATGGAGTACCCATACGACGTACCAGATTACGCTATGTATAGCTTACCAAGTTGCC	Amplifies fragment comprising the complete N-terminal and homeodomain regions of the HD2 gene plus a tail of 40 bp at both 5 ⁴ and 3 ⁵ ends (complementary to the pGADT7 plasmid)	
MP190- TTGAAGTGAACCTGCGGGTTTTTCAGTATCTACGATTCAGAGCGCCGATTACGGCG		

¹ Short version of the genes HD1 and HD2 comprises the complete N-terminal region and homeodomain region of each of the genes (first 183 amino acids of HD1 and the first 196 amino acids of HD2).

² 5'-tail before MCS in pGBKT7 plasmid: CATCATGGAGGAGCAGAAGCTGATCTCAGAGGAGGACCTG

³ 3'-tail after MCS in pGBKT7 p plasmid: TCAAGACCCGTTTAGAGGCCCAAGGGGTTATGCTAGTTA

⁴ 5'-tail before MCS in pGADT7 plasmid: CGCCGCCATGGAGTACCCATACGACGTACCAGATTACGGCT

⁵ 3'-tail after MCS in pGADT7 plasmid: TTGAAGTGAACCTGCGGGTTTTTCAGTATCTACGATTCA