

**Table S7**

Disorder content\* within each domain of AVPR2 in which intrinsic disorder was observed.

	<b>N-terminal</b>	<b>ICL3</b>	<b>C-terminal</b>
Human	0.87	0.79	0.52
Chimpanzee	0.87	0.79	0.52
Gorilla	0.87	0.79	0.52
Orangutan	-	0.33	0.42
Gibbon	1.00	0.69	0.52
Macaque	1.00	0.79	0.52
Baboon	1.00	0.79	0.51
Squirrel monkey	0.72	0.33	0.76
Marmoset	-	0.21	1.00
Bushbaby	0.87	0.10	0.52
Mouse	0.89	0.79	0.44
Rat	0.89	0.79	0.43
Kangaroo rat	0.89	0.79	0.50
Naked mole rat	1.00	0.76	0.41
Guinea pig	0.89	0.49	0.38
Squirrel	1.00	0.79	0.43
Rabbit	1.00	0.69	0.45
Pika	0.78	0.36	0.52
Orca	0.88	0.79	0.40
Cow	0.72	0.23	0.44
sheep	0.81	0.21	0.50
Pig	0.84	0.74	0.79
Panda	0.87	0.38	0.38
Ferret	0.71	0.21	0.52
Dog	0.84	0.19	0.43
Cat	0.92	0.49	0.48
Rhinoceros	1.00	0.74	0.43
Horse	1.00	0.64	0.48
Microbat	1.00	0.63	0.43
Megabat	0.39	0.77	0.38
Shrew	0.80	0.19	0.38
Armadillo	1.00	0.41	0.74
Lesser hedgehog tenrec	1.00	0.62	1.00
Manatee	1.00	0.79	0.53
Elephant	1.00	0.79	0.51

\*Disorder content: Proportion of amino acids predicted as intrinsically disordered considering the total number of amino acid residues in each region. The domains that lack disorder content for all the species were not included in the table .The symbol “-“ indicates the absence of amino acid residues predicted as intrinsically disordered.