

**Table S5**

Disorder content\* within each domain of AVPR1a in which intrinsic disorder was observed.

Species	N-terminal	ICL3	ECL3	C-terminal
Human	0.98	0.08	-	0.88
Chimpanzee	0.98	0.18	-	0.88
Gorilla	0.92	0.18	-	0.88
Orangutan	0.96	0.21	-	0.78
Gibbon	0.98	0.20	-	0.88
Macaque	0.56	0.08	-	0.80
Baboon	0.56	0.23	-	0.80
Squirrel monkey	1.00	0.23	-	0.78
Marmoset	1.00	0.20	-	0.53
Bushbaby	0.40	0.27	0.5	0.78
Mouse	1.00	0.33	-	0.73
Rat	0.92	0.31	-	0.75
Kangaroo rat	0.96	0.10	-	0.88
Naked mole rat	0.58		-	0.90
Guinea pig	0.32	0.06	-	0.90
Squirrel	1.00	0.46	-	0.85
Rabbit	1.00	0.42	-	0.85
Pika	0.96	0.33	-	0.78
Orca	1.00	0.06	-	0.83
Cow	0.98	0.37	-	0.75
sheep	0.98	0.34	-	0.73
Pig	0.98	0.20	-	0.85
Panda	0.56		-	0.86
Ferret	1.00	0.06	-	0.88
Dog	0.96	0.80	-	
Cat	0.96	-	-	0.86
Rhinoceros	0.96	0.21	-	0.83
Horse	1.00	0.42	-	0.90
Microbat	1.00	0.21	-	0.81
Megabat	0.98	0.45	-	0.83
Shrew	1.00	0.51	-	0.86
Armadillo	0.54	0.45	-	0.86
Lesser hedgehog tenrec	1.00	0.32	-	0.90
Manatee	1.00	0.45	-	0.88
Elephant	0.96	0.08	-	0.86

\*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.