

Table S1. CGG repeat lengths in the *FMR1* 5' UTR across different species**Non-Primate Mammals**

Species	Repeat Length	Species	Repeat Length
<i>Microtus agrestis</i> (vole) ¹	4	<i>Carollia perspicillata</i> (bat) ¹	9
<i>Bos taurus</i> (cow) ¹	4	<i>Mus caroli</i> (mouse) ¹	9
<i>Ovis aries</i> (sheep) ¹	4	<i>Mus musculus</i> (mouse) ¹	9
<i>Chaetophractus villosus</i> (hairy armadillo) ¹	4	<i>Hippopotamus amphibus</i> (hippo) ³	9
<i>Mesocricetus auratus</i> (hamster) ¹	5	<i>Bandicota bengalensis</i> (Indian mole rat) ³	9
<i>Stenella plagiodon</i> (dolphin) ¹	5	<i>Cavia porcellus</i> (Guinea pig) ³	9
<i>Ornithorhynchus anatinus</i> (platypus) ¹	5	<i>Mus spretus</i> (mouse) ¹	10
<i>Herpestes ichneumon</i> (mongoose) ¹	6	<i>Canis familiaris</i> (dog) ¹	11
<i>Rattus norvegicus</i> (rat) ¹	6	<i>Ammospermophilus harrisi</i> (squirrel) ¹	11
<i>Panthera leo</i> (lion) ¹	8	<i>Cricetulus griseus</i> (Chinese hamster) ³	11
<i>Myotis yumaneni</i> (bat) ¹	8	<i>Micronycteris hirsuta</i> (bat) ¹	12
<i>Equus caballus</i> (horse) ³	8	<i>Sus scrofa</i> (wild boar) ¹	12
<i>Felis doesticus</i> (cat) ¹	9	<i>Sus domesticus</i> (mini pig) ⁴	14
<i>Euarctos americanus</i> (polar bear) ¹	9	<i>Artibeus obscura</i> (bat) ¹	18
<i>Zalophus californianus</i> (seal) ¹	9	<i>Artibeus jamaicensis</i> (bat) ¹	19

Non-Human Primates

Species	Repeat Length
<i>Pan troglodytes</i> (chimpanzee) ¹	20-38
<i>Pan paniscus</i> (bonobo) ¹	37, 39
<i>G. gorilla gorilla</i> (gorilla) ¹	22,26
<i>G. gorilla beringel</i> (gorilla) ¹	
<i>G. gorilla graueri</i> (gorilla) ¹	
<i>Pongo pygmaeus</i> (orangutan) ¹	26
<i>Hylobates lar</i> (gibbon) ¹	22,24
<i>Hylobates syndactylus</i> (siamang) ¹	24
<i>Papio</i> (baboon) ¹	32
<i>Macaca mulatta</i> (rhesus monkey) ^{1,2}	25,33
<i>Mandrillus leucophaeus</i> (drill) ¹	24
<i>Allenopithecus nigroviridis</i> (Allen's monkey) ¹	20
<i>Nasalis larvatus</i> (proboscis monkey) ¹	7
<i>Rhinopithecus roxellana</i> (Golden monkey) ¹	7
<i>Pygathrix nemaeus</i> (Douc's Langur) ¹	10
<i>Colobus guereza</i> (Colobus monkey) ¹	8
<i>Saimiri sciruesus</i> (squirrel monkey) ¹	25
<i>Lentopithecus saguinus</i> (marmoset) ¹	9
<i>Nycticebus coucang</i> (Slow Loris) ¹	17,18
<i>Lemus fulvianus</i> (lemur) ¹	14
<i>Varecia variegata</i> (ruffed lemur) ¹	7

¹Echler et al (1995) *Nature Genetics*²Garcia Arocena et al (2003) *Hum Gen*³Deelen et al (1994) *Am J Med Gen*⁴Madsen et al (2007) *Neurogenetics*