

Names for Kx (ISBT 019) Blood Group Alleles

General description: The Kx blood group system contains one antigen carried on a multipass protein of 444 amino acids, which is linked to the Kell glycoprotein though a disulphide bond.

Gene name: *XK*
 Number of exons: 3
 Initiation codon: Within exon 1
 Stop codon: Within exon 3
 Entrez Gene ID: 7504
 LRG sequence: NG_007479.1 (genomic)
 NM_002101.4 (transcript)
 Reference allele: *XK*01* (shaded)

Reference allele <i>XK*01</i> encodes XK1				
Phenotype	Allele name	Nucleotide change†	Exon	Predicted amino acid change
XK:1 or Kx+	<i>XK*01</i>			
Null phenotypes				
XK:-1 or Kx- (McLeod)	<i>XK*N.01</i>	Gene deletion**	1, 2, 3	del exons 1-3
XK:-1 or Kx- (McLeod)	<i>XK*N.02</i>	del exon 1	1	del exon 1
XK:-1 or Kx- (McLeod)	<i>XK*N.03</i>	del promoter + exon 1	1	del exon 1
XK:-1 or Kx- (McLeod)	<i>XK*N.04</i>	del exon 2	2	del 82-170
XK:-1 or Kx- (McLeod)	<i>XK*N.05</i>	del intron 2 + exon 3	3	del 170-444
XK:-1 or Kx- (McLeod)	<i>XK*N.06</i>	c.-272_119del	1	del 1-40fs
XK:-1 or Kx- (McLeod)	<i>XK*N.07</i>	c.172delG	1	p.Val58Tyrfs*72
XK:-1 or Kx- (McLeod)	<i>XK*N.08</i>	c.269delA	2	p.Tyr90Serfs*40
XK:-1 or Kx- (McLeod)	<i>XK*N.09</i>	c.268delT	2	p.Tyr90Thrfs*40
XK:-1 or Kx- (McLeod)	<i>XK*N.10</i>	c.450_451insC	2	p.Gln151Profs*48
XK:-1 or Kx- (McLeod)	<i>XK*N.11</i>	c.686_687delTT	3	p.Phe229Tyrfs*36
XK:-1 or Kx- (McLeod)	<i>XK*N.12</i>	c.771delG	3	p.Trp257Cysfs*11
XK:-1 or Kx- (McLeod)	<i>XK*N.13</i>	c.856_860delCTCTA	3	p.Leu286Tyrfs*16
XK:-1 or Kx- (McLeod)	<i>XK*N.14</i>	c.938_951del	3	p.Asn313Thrfs*24
XK:-1 or Kx- (McLeod)	<i>XK*N.15</i>	c.1013delT	3	p.Phe338Serfs*71
XK:-1 or Kx- (McLeod)	<i>XK*N.16</i>	c.107G>A	1	p.Trp36Ter

Names for XK (ISBT 019) blood group alleles v3.0 160622

XK:-1 or Kx- (McLeod)	<i>XK*N.17</i>	c.397C>T	2	p.Arg133Ter
XK:-1 or Kx- (McLeod)	<i>XK*N.18</i>	c.463C>T	2	p.Gln155Ter
XK:-1 or Kx- (McLeod)	<i>XK*N.19</i>	c.707G>A	3	p.Trp236Ter
XK:-1 or Kx- (McLeod)	<i>XK*N.20</i>	c.895C>T	3	p.Gln299Ter
XK:-1 or Kx- (McLeod)	<i>XK*N.21</i>	c.941G>A	3	p.Trp314Ter
XK:-1 or Kx- (McLeod)	<i>XK*N.22</i>	c.245+1G>C	Intron 1	Alternative splicing
XK:-1 or Kx- (McLeod)	<i>XK*N.23</i>	c.246-1G>A	Intron 1	Alternative splicing
XK:-1 or Kx- (McLeod)	<i>XK*N.24</i>	c.508+1G>A	Intron 2	Alternative splicing
XK:-1 or Kx- (McLeod)	<i>XK*N.25</i>	c.508+5G>A	Intron 2	Alternative splicing
XK:-1 or Kx- (McLeod)	<i>XK*N.26</i>	c.509-1G>A	Intron 2	Alternative splicing
XK:-1 or Kx- (McLeod)	<i>XK*N.27</i>	c.664C>G	3	p.Arg222Gly
XK:-1 or Kx- (McLeod)	<i>XK*N.28</i>	c.880T>C	3	p.Cys294Arg
XK:-1 or Kx- (McLeod)	<i>XK*N.29</i>	c.979G>A	3	p.Glu327Lys

† Nucleotide 1 is the first nucleotide of the translation-initiating codon, which is 82 bp downstream of the traditional position for the first nucleotide in early reports.