

Names for KN (ISBT 022) Blood Group Alleles

General description: The Knops blood group system consists of 9 antigens carried on a glycoprotein of 1998 amino acids and called the Complement Receptor I (CR1, CD35). It has a leader sequence of 41 to 46 amino acids, depending on translation initiation site, which is cleaved from the membrane protein. The coding sequence starts at nucleotide 28.

Gene name: *KN*
 Number of exons: 39 (*CR1*1*)
 Initiation codon: Beginning of exon 1
 Stop codon: End of exon 38 (*CR1*1*)
 Entrez Gene ID: 1378
 LRG sequence: NG_007481.1 (genomic)
 NM_000573.3 (transcript)
 Reference allele: *KN*01* (shaded)
 Acceptable: *KN*A*, or *Kn^a* if inferred by haemagglutination

Reference allele <i>KN*01</i> encodes KN1, KN3, KN4, KN8, KN9				
Phenotype	Allele name	Nucleotide change	Exon	Amino acid change
KN:1 Kn(a+)	<i>KN*01</i> or <i>KN*A</i>			
KN:2 or Kn(b+)	<i>KN*02</i> or <i>KN*B</i>	c.4681G>A	29	p.Val1561Met
KN:5 or Yk(a-)	<i>KN*01.-05</i>	c.4223C>T	26	p.Thr1408Met
KN:6 or McC(b+)	<i>KN*01.06</i>	c.4768A>G	29	p.Lys1590Glu
KN:7 or Vil+	<i>KN*01.07</i>	c.4801A>G	29	p.Arg1601Gly
KN:-8 or SI3-	<i>KN*01.-08</i>	c.4828T>A	29	p.Ser1610Thr †
KN:-9 or KCAM-	<i>KN*01.-09</i>	c.4843A>G	29	p.Ile1615Val

Note: Nucleotides are numbered from the codon for Met, so numbering will differ from published by -27 nucleotides.

† Arg1601 and Ser1610 are required for SI3 expression