Names for OK (ISBT 024) Blood Group Alleles

General description: The OK blood group system consists of 3 antigens carried on a

single pass type I membrane glycoprotein with 2 IgSF domains called Basigin (aka CD147, neurothelin, EMMPRIN). It consists of 248 amino acids and has a leader sequence of 21 amino acids,

which is cleaved from the membrane bound protein.

Gene name: *OK*Number of exons: 8

Initiation codon: Beginning of exon 1

Stop codon: End of exon 7

Entrez Gene ID: 682

LRG sequence: NG_007468.1 (genomic)

NM_198589.2 (transcript)

Reference allele: OK*01 (shaded)

Acceptable: OK*A, or Ok^a if inferred by haemagglutination

Reference allele <i>OK*01</i> encodes OK1, OK2 and OK3				
Phenotype	Allele name	Nucleotide change	Exon	Predicted amino acid change
OK:1 or Ok(a+)	OK*01.01			
OK:-1 or Ok(a-)	OK*01.–01	c.274G>A	4	p.Glu92Lys
OK:-2 or OKGV-	OK*0102	c.176G>T	2	p.Gly59Val [1]
OK:-3 or OKVM-	OK*0103	c.178G>A	2	p.Val60Met [2]

- [1] Karamatic Crew V et al.. Transfusion Medicine 2003; 13: 32 (suppl. 1)
- [2] Karamatic Crew V et al. Transfusion Medicine 2006; 16:41 (suppl.1)