

Names for IN (ISBT 023) Blood Group Alleles

General description: The IN blood group system consists of **6** antigens carried on a glycoprotein (CD44) of 361 amino acids. It has a leader sequence of 20 amino acids that is sometimes cleaved. The protein is found in many different tissues and multiple tissue-specific isoforms of CD44 exist. The haemopoietic form is approximately 80kDa.

Gene name: *IN*

Number of exons: 9 (by NCBI Reference Sequence)
https://www.ncbi.nlm.nih.gov/nucleotide/NG_008937.1?from=5001&to=98533&report=genbank
http://ftp.ebi.ac.uk/pub/databases/lrgex/pending/LRG_815.xml

Initiation codon: Beginning of exon 1

Stop codon: End of exon 9

Entrez Gene ID: 960

GenBank #: NG_008937.1 (genomic)
 NM_001001391.1 (transcript)

Reference allele: *IN*02* (shaded)
 Acceptable: *IN*B*, or *In^b* if inferred by haemagglutination

<i>IN*02</i> encodes In ^b , INFI, INJA, INRA and INSL				
Phenotype	Allele name	Nucleotide change	Exon	Predicted amino acid change
In(a+b-)	<i>IN*01</i> or <i>IN*A</i>	c.137G>C	2	p.Arg46Pro
In(a-b+)	<i>IN*02</i> or <i>IN*B</i>			
IN:-3 or INFI-	<i>IN*02.-03</i>	c.255C>G	3	p.His85Gln
IN:-4 or INJA-	<i>IN*02.-04</i>	c.488C>A	5	p.Thr163Lys
IN: -5 or INRA-	<i>IN*02.-05</i>	c.449G>A	5	p.Arg150His
IN: -6 or INSL-	<i>IN*02.-06</i>	c.276C>A	3	p.His92Gln