

Names for YT (ISBT 011) Blood Group Alleles

General description: The Yt blood group system consists of 2 antigens carried on a GPI-linked glycoprotein (AChE) that consists of 617 amino acids. It has a leader sequence of 31 amino acids and a GPI motif of 29 amino acids, both of which are cleaved from the membrane bound protein. The protein is encoded by *ACHE*, or *YT* if analysis is to predict a blood group antigen.

Gene name: *YT*

Number of exons: 6

Initiation codon: Beginning of exon 2

Stop codon: Within exon 6

Entrez Gene ID: 43

LRG sequence 804: NG_007474.2 (genomic)
 NM_001302621.1 (transcript)
 NP_001289550.1 (protein)

Reference allele: *YT*01* (shaded)

Acceptable: *YT*A*, or *Yt^a* if inferred by haemagglutination

Reference allele <i>YT*01</i> encodes YT1				
Phenotype	Allele name	Nucleotide change	Exon	Predicted amino acid change
YT:1 or Yt(a+)	<i>YT*01</i> or <i>YT*A</i>			
YT:2 or Yt(b+)	<i>YT*02</i> or <i>YT*B</i>	c.1057C>A	2	p.His353Asn
YT:3 or YTEG	<i>YT*03</i>	c.266G>A	2	p. Gly89Glu [1]

- 1 Laundry R, Karamatic Crew V, Davies H, et al.: A novel high frequency antigen in the Yt blood group system. *Transfusion Medicine* 2017; 27 (Suppl. 2): 42-3.