Names for XG (ISBT 012) Blood Group Alleles

Intro

General description: The XG blood group system consists of 2 antigens carried on 2 single-pass glycoproteins, encoded by the genes XG and CD99, located in pseudoautosomal region 1 (PAR1) of the sex chromosomes. The Xg glycoprotein is encoded by the X chromosome only, while the CD99 glycoprotein is encoded by both X and Y chromosomes. On Y, only exons 1-3 of XG exist. Both genes encode single pass glycoproteins of 180 and 185 amino acids, respectively.

Gene name: XG

Number of exons: 10
Initiation codon: Within exon 1
Stop codon: Within exon 10

Entrez Gene ID: 7499

LRG: LRG_805
LRG sequence: NG_011627.1 (genomic)
NM_175569.2 (transcript)

Reference allele: XG*01 (shaded)

Reference allele
XG*01 encodes: Xg^a

Antithetical antigens: n.a.

Additional information

Gene name: CD99

Number of exons: 10
Initiation codon: Within exon 1
Stop codon: Within exon 10

Entrez Gene ID: 4267

LRG: LRG_1023
LRG sequence: NG_009174.1 (genomic)
NM_002414.3 (transcript)
Reference allele: \( CD99^{*01} \) (shaded)

Reference allele CD99

\( CD99^{*01} \) encodes: CD99

Antithetical antigens: n.a.

Additional information
<table>
<thead>
<tr>
<th>Phenotype</th>
<th>Allele name</th>
<th>Nucleotide change</th>
<th>Exon</th>
<th>Predicted amino acid change</th>
<th>(Reference No.) PMID</th>
<th>Accession number</th>
<th>rs number</th>
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<td>XG&lt;sup&gt;*01&lt;/sup&gt;</td>
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References


Intro Text changed

Changed and expanded: The XG blood group system consists of 2 antigens carried on 2 single-pass glycoproteins, encoded by the genes XG and CD99, located in pseudoautosomal region 1 (PAR1) of the sex chromosomes. The Xg glycoprotein is encoded by the X chromosome only, while the CD99 glycoprotein is encoded by both X and Y chromosomes. On Y, only exons 1-3 of XG exist. Both genes encode single pass glycoproteins of 180 and 185 amino acids, respectively.

Intro LRG ID line added: LRG_802

Allele Table Inserted

References References found for all alleles and collated

End of changes