Names for RAPH (ISBT 025) Blood Group Alleles

Intro

General description: The Raph blood group system consists of one antigen (MER2) carried on a multipass membrane glycoprotein CD151 of the tetraspanin family. It consists of 253 amino acids and both amino and carboxyl termini are predicted to be intracellular. The glycoprotein is encoded by \textit{CD151} (or \textit{RAPH}, if analysis is to predict a blood group antigen). The null phenotype is associated with renal failure.

Gene name: \textit{CD151 (RAPH)}
Number of exons: 9
Initiation codon: Within exon 3
Stop codon: Within exon 9
Entrez Gene ID: 977
LRG: 817
LRG sequence: NG_007478.1 (genomic)  
NM_004357.4 (transcript)  
NP_004348.2 (protein)
Reference allele: \textit{RAPH*01 (shaded)}
Acceptable: \textit{RAPH*1} or \textit{MER2} if inferred by haemagglutination
Reference allele
\textit{RAPH*01} encodes for: \textit{RAPH1}
Antithetical antigens n.a.
<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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</thead>
<tbody>
<tr>
<td>RAPH:1 or MER2+</td>
<td>RAPH*01</td>
<td></td>
<td></td>
<td></td>
<td>(1). PMID:15265795</td>
<td>NG_007478</td>
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<tr>
<td>RAPH:-1 or MER2-</td>
<td>RAPH*01.-01.01</td>
<td>c.511C&gt;T c.579A&gt;G</td>
<td>7</td>
<td>p.Arg171Cys p.Gly193</td>
<td>(2), PMID:18522704</td>
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<td>p.Arg178His</td>
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<td>rs779114765</td>
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<td>Null phenotypes</td>
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References


Track of changes from v4.0 160662 to v5.0 01-MAR-2020

Created: Vered Yahalom, December 2019
Reviewed: Vanja Karamatic Crew
Nicole Thornton, January 2020

General
First Excel map version. Spread-sheets "Intro", "Allele Table", "References" and "Versioning" created.

Intro Antithetical alleles line added n.a.

Allele Table Table column and header additions n.a.
Allele Table Antigen/allele added: n.a.

References All references new: n.a.

End of changes from v4.0 160662 to v5.0 01-MAR-2020

Track of changes from v5.0 01-MAR-2020 to v6.0 30-OCT-2020

Allele Table Allele renamed RAPH*−01.01
Allele renamed RAPH*−01.02
Allele renamed RAPH*−01.03

End of changes from v5.0 01-MAR-2020 to v6.0 30-OCT-2020