|  |  |
| --- | --- |
| WWorking Party on Red Cell Immunogenetics and Blood Group Terminology | C:\Users\judithc\Desktop\Logos\ISBT logo.jpg |

**Criteria for assignment of a new blood group antigen**

**Please tick the boxes appropriate to support your submission**

▢ The antigen must be found on erythrocytes.
Request for the WP to consider: ▢ Footnote 1 ▢ Footnote 2

▢ The antigen must be defined by human antibodies that are neither autoantibodies nor exist only as
 monoclonal antibodies, i.e. these antibodies have been made by at least one individual lacking the
 antigen in question.

▢ An antigen must be inherited.

Inheritance can be shown either according to pedigree following a family study, or, if a family study has not been performed, by reporting at least two unrelated probands with the same serological phenotype.

If the new antigen belongs to a known system, the corresponding genetic change needs to be shown.

**At least one of the following four criteria must also be met:**

▢ An antithetical relationship is shown between a new antigen and one (or more) already assigned.

▢ Expression of the antigen is associated with a variation in the nucleotide sequence of a gene controlling a preexisting system. Causal proof (e.g. by knock-in or knock-down/knock-out experiments in cell lines) is preferred but may not be necessary if the WP deems the association data sufficient.

▢ Evidence, from a linkage analysis of family data, that the implicated allele is very likely to be a newly recognised form of the gene in question, thereby supporting serological and/or biochemical information.

▢ Demonstration that an antigen is located on a protein, glycoprotein or lipoprotein that carries other antigens belonging to a preexisting system. Carrier identity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

▢ Other remarks to help the WP make a decision: \_\_\_\_\_\_

1. If the antigen is difficult to detect by standard hemagglutination on erythrocytes, the WP may take into consideration if it can be detected by alternative methods (e.g. flow cytometry or mass spectrometry) and make decisions about each antigen candidate given the whole body of evidence presented.
2. The WP may also take into consideration if the antigen can be detected on reticulocytes and/or other earlier erythroid cell stages, and possibly also the clinical consequences thereof (e.g. if the antigen/antibodies in question result in pathologies often associated with other blood groups).

**Please provide nomenclature recommendations including**

**recommended Blood Group System, or Blood Group Antigen name(s)**

**and allele name(s) etc, as appropriate to your submission.**

Proposed system name Proposed system number \_\_\_

Proposed antigen name Proposed antigen number

Phenotype Encoded by gene

Carrier molecule Allele names

 Rs-numbers associated Sequence Accession No.

**Other comments, e.g. explain origin of name(s) suggested:**