

The 700 Series of Low-Incidence Antigens

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Antigens in this series occur in less than 1% in most populations; as the responsible genes are not known, they cannot be placed in a Blood Group System, and do not meet the criteria for being placed in a Collection.

Found as											
Number	Symbol	Name	# of probands	# of antibodies	Immune	Stimulus not known	Multi-specific	Mono-specific	Caused HDFN	Enzymes Chemicals	Comments
700.002	By	Batty	Few	Many	✓	✓	✓		+ DAT	Papain/ficin/ α-chymotrypsin resistant; AET resistant	Original anti-By stimulated by pregnancy; Antibody found in AIHA.
700.003	Chr ^a	Christiansen	Two	Few		✓		✓	No	Trypsin resistant	Found in Danes
700.005	Bi	Biles	Few	Few	✓				Probably	Trypsin sensitive	Original anti-Bi stimulated by pregnancy
700.006	Bx ^a	Box	Few	Few		✓	✓			Papain resistant	Antibody found in AIHA.
700.017	To ^a	Torkildsen	Few	Many		✓	✓	✓		Ficin resistant (lytic)	Some cold reactive, IgM bind complement, others are IgG; Scandinavian
700.018	Pt ^a	Peters	Few	Many		✓	✓			Papain/ficin/ α-chymotrypsin sensitive; Trypsin resistant; AET resistant	M _r approx. 31,600
700.019	Re ^a	Reid	Few	Few	✓				Mild + DAT	Papain/ficin/ trypsin/ α-chymotrypsin resistant	
700.021	Je ^a	Jensen	Few	Few		✓			No	Papain/ficin sensitive	Danish; IgM

700.028	Li ^a	Livesey	Few	Few	✓	✓			Mild	Papain/ficin resistant	Maybe part of Lutheran system
700.039		Milne	1	Many		✓	✓			Papain/ficin resistant (lytic)	IgM
700.040	RASM	Rasmussen	1	1	✓			✓	+DAT	Papain/ficin/ trypsin resistant; DTT/AET sensitive	IgG
700.044	JFV		2	Few	✓			✓	+DAT to moderate	Papain resistant (†); DTT/AET resistant	German/Dutch probands
700.045	Kg	Katagiri	1	1	✓				Severe	Papain/trypsin resistant	Japanese
700.047	JONES	Jones	2	Few	✓			✓	Moderate	Papain/ficin/ trypsin/ α-chymotrypsin resistant (†); AET resistant	May be an Rh antigen
700.049	HJK		1	1	✓			✓	Severe		
700.050	HOFM		1	1	✓			✓	Mild	Papain resistant (†); DTT/AET resistant	May be an Rh antigen; associated with weak C antigen; Dutch
700.052	SARA	SARAH	Few	Few	✓	✓	✓	✓	Severe (Towns et al., 2011)	Papain/trypsin/ α-chymotrypsin resistant; DTT/ AET resistant	Australian; Canadian
700.054	REIT		Few	1					Severe	AET resistant	

Few = 1–5 examples; Several = 6–12 examples; Many = 13 or more examples; Not known = apparently naturally-occurring.

(†) = enhanced reactivity.

For obsolete numbers see www.isbt.org.

Towns D, et al. (2011). Hemolytic disease of the fetus and newborn caused by an antibody to a low-prevalence antigen, anti-SARA. *Transfusion*; 51: 1977–1979.

Note, not all the antibody/antigen combinations have been tested with all enzymes and chemicals. We have given those that have been reported.