

HDFN TECHNICAL CASE # 1

Titration, Saline/tube IAT test using 2 drops of plasma, 1 drop of Fy^{a+b} RBCs, and 60" incubation at 37°

ANTIBODY: Anti-Fy^a			EDC:				Tech:				Date tested:				
Sample dilution, Reaction strength at AHG phase:															
Sample date:	1	2	4	8	16	32	64	128	256	512	1024	2048	4096	8192	Titer
Old:															
New	2+	1+	w+	vw+	0	0	0	0	0						
Cell type: R1R1, Fy(a+, b+)			Manufacturer:				Lot number:				Comment:				

Questions:

1. Is the antibody identity of the outside laboratory confirmed? If not, what is the phenotype of the additional cells you would like to test?
2. Does this antibody cause hemolytic transfusion reactions? Hemolytic disease of the fetus and newborn?
3. What is the titer? Is anti-Fy^a of this titer likely to cause anemia in the fetus?
4. What is the probable immunizing stimulus in this case?
5. Is there any further testing that could be performed to evaluate the possibility of HDFN? (Hint: could the fetus be antigen negative?)
6. What percentage of Caucasian donors are expected to be compatible with this recipient? African-American donors?