

SAMPLES OF PHENOGROUP EFFECTS

IN REACTIVITY

Most standard cattle A' reagents strong with O_1A' but weak with $BO_2Y_1A'E_3'G'$ and $BO_2Y_2A'E_3'G'Y'$.

A standard cattle D' reagent strong with $O_xD'E_3'F'G'O'$ but weak with BGKD' (actually = $BGKD'_2$).

ON TITER

Five independent sources of standard cattle G reagent * exhibited the following extreme titer differences of representative phenogroups:

G (1)	$\frac{1}{2}$ B_2GI	1/32	B28**		
G (2)	1/16 GY_2E_1'			1/128	GO_1Q
G (3)	1/8 GY_2E_1'	1/32	B28	1/128	unknown phenogroup $BGKO_1Y_1D'$ factors present
G (4)	little or no difference				
G (5)	little or no difference				

A standard cattle E_3' reagent titered 1/8 with $O_xE_3'O'$ and 1/512 with $T_1E_3'F'$.

Dosage effects have been excluded in the above data except for the unknown phenogroup.

** B28 is the code for $BGKO_2Y_1A'B'E_3'G'K'O'Y'$.

* Excerpt from THE IMMUNOGENETICS LETTER July 1959 No. 2.

IN IMMUNIZATION

T_1 reagent in cattle easily obtained from $T_1E_3'F'$ or $O_xT_1Y_1A'E_3'G'$ cellular phenogroups but not from $O_1T_1E_3'F'K'$ nor $O_1T_1E_3'F'I'K'$ used as antigen.

If each factor were an antigen, no such effects would be expected.