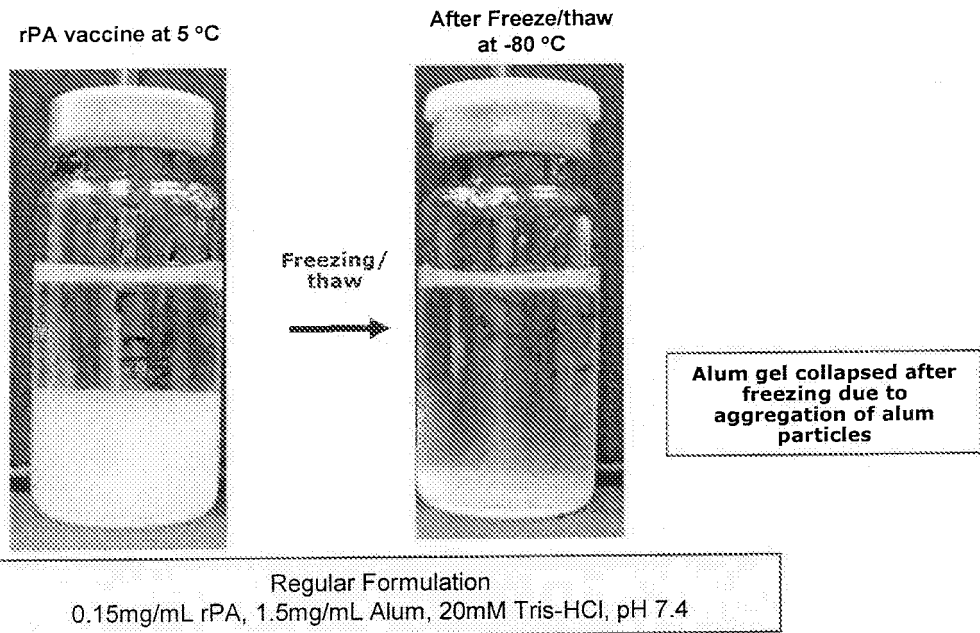


Comparison of rPA102 vaccine before and after Freeze/Thaw



Freeze/Thaw	Intact rPA102		Desorbed rPA102		
	Fluorescence (320/350)	In-vivo (MRPT)**	MLA	RP-HPLC (Purity)	SE-HPLC (%Monomer)
Before	1.21	0.38	18%	82.84	94.58
After Freezing	0.94*	0.20***	2%	74.95	79.8

* Indicating change in rPA102 protein structure after freezing, data from AD (AD12117 FD samples)
 ** Data from MRPT group
 *** Statistical significant at 95% CI

- Freezing damages rPA102 vaccine
- Potency (MRPT) data correlates with physio-chemical and gel height (collapsed)

FIG. 1

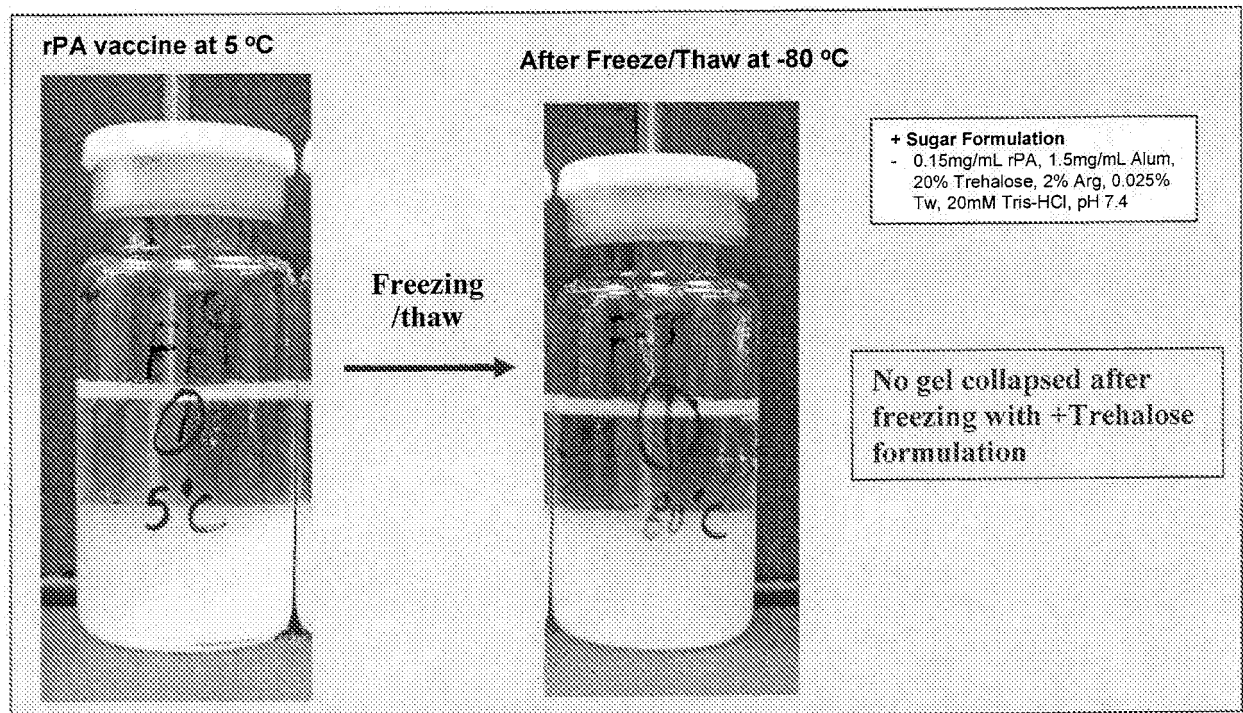


FIG. 2

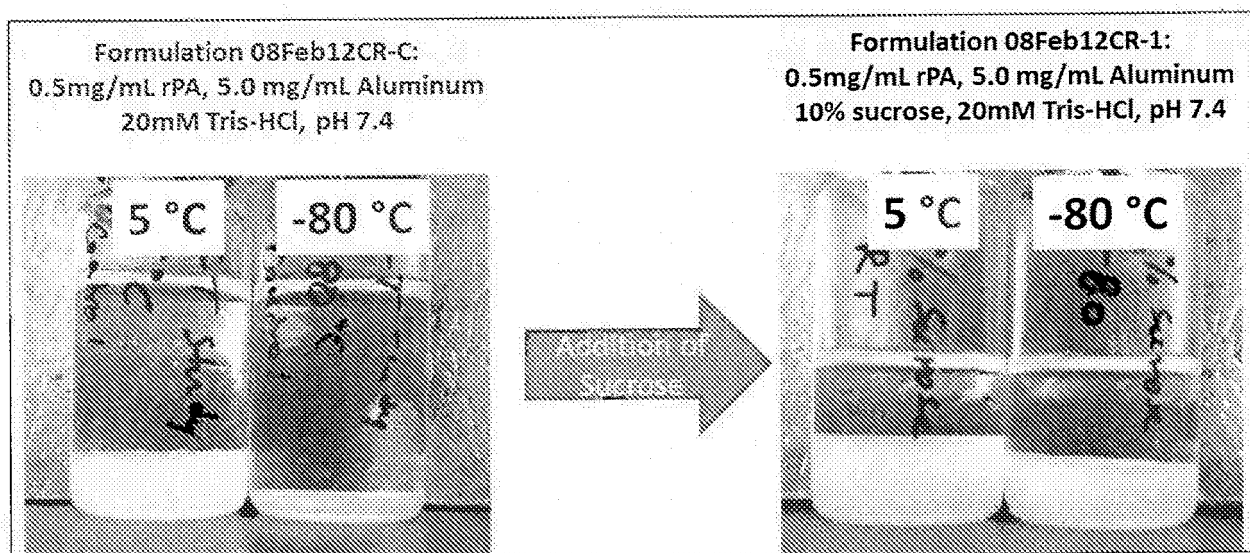
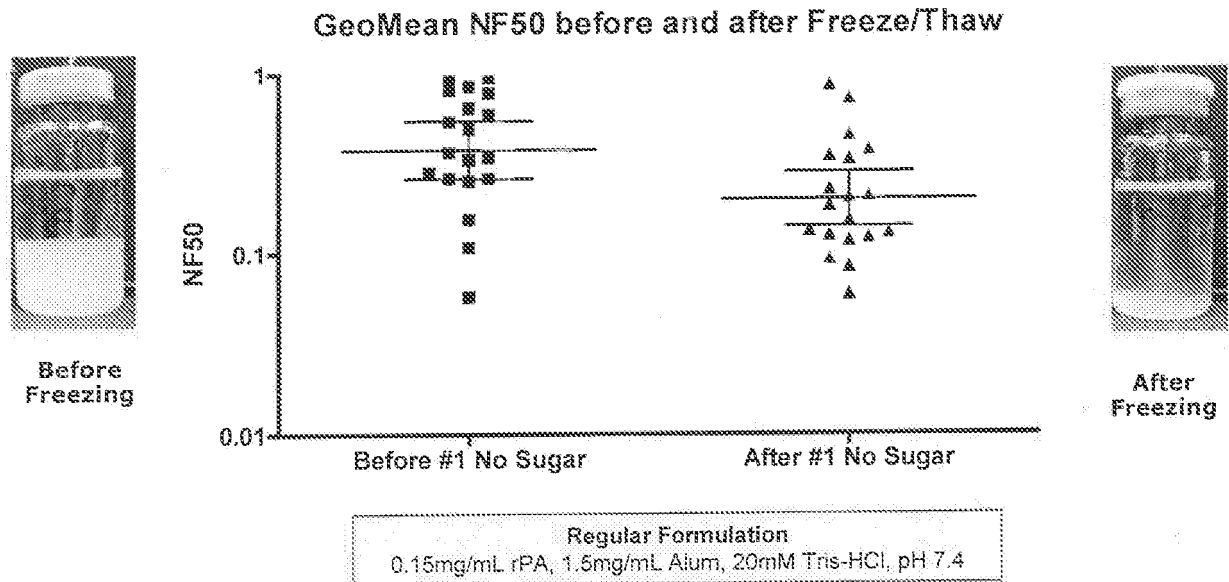


FIG. 3

Freezing reduce potency of rPA102 vaccine (regular formulation)



- After freezing, geomean NF50 of 19 mice is statistically lower than that before freezing
- Note: Potency drop correlates with gel collapse

FIG. 4

NF50 response of before freezing samples of three study groups
(GeoMean)

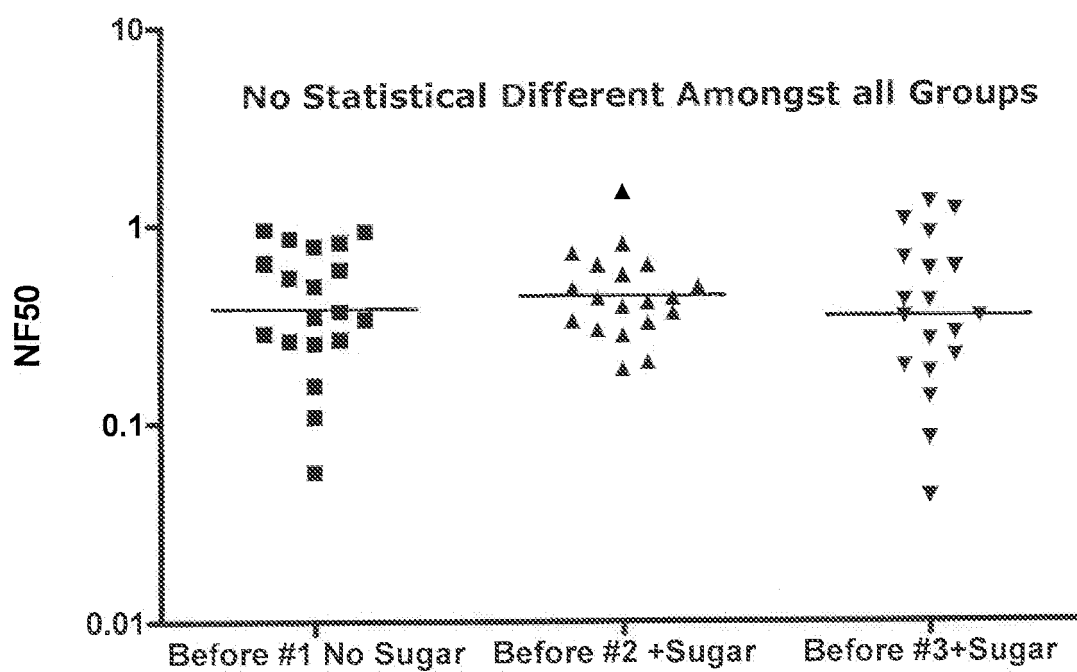


FIG. 5

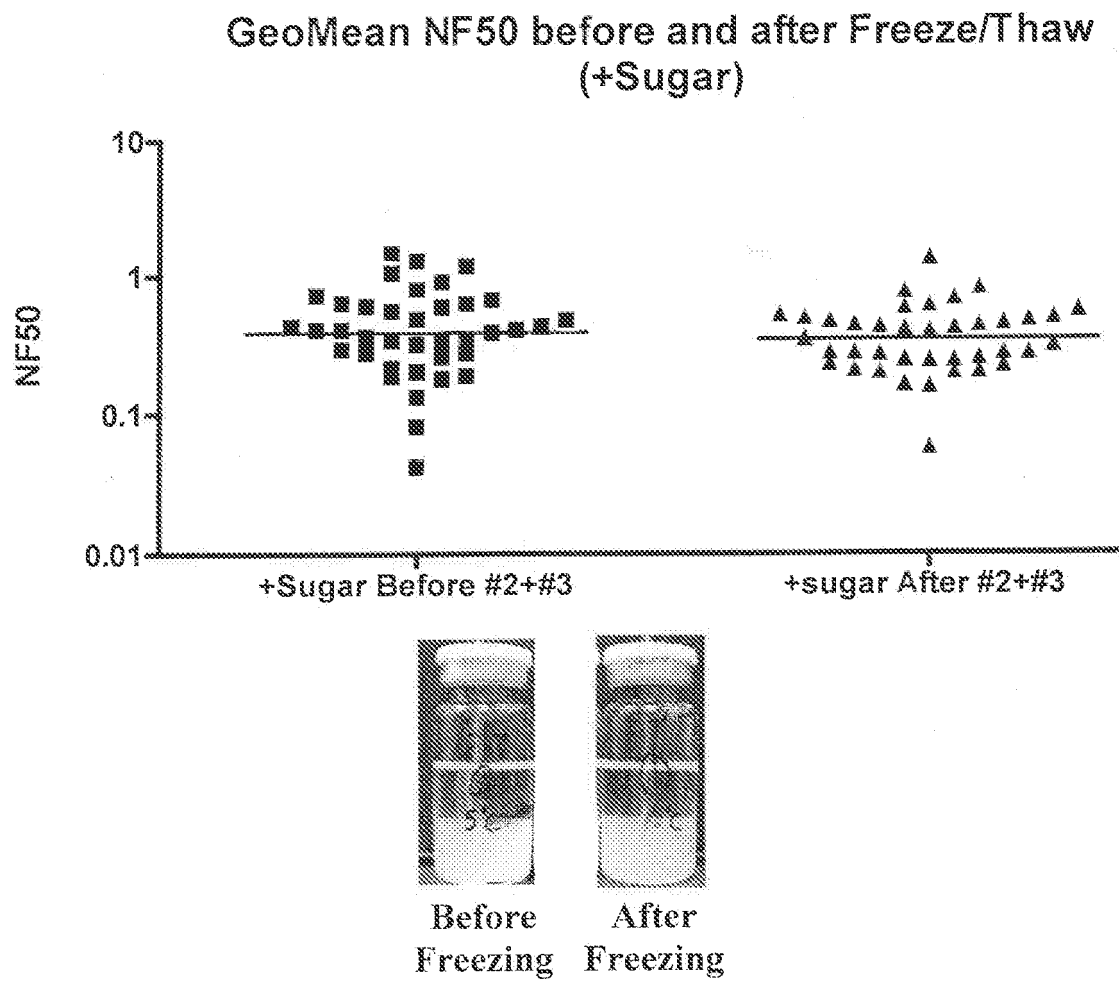


FIG. 6

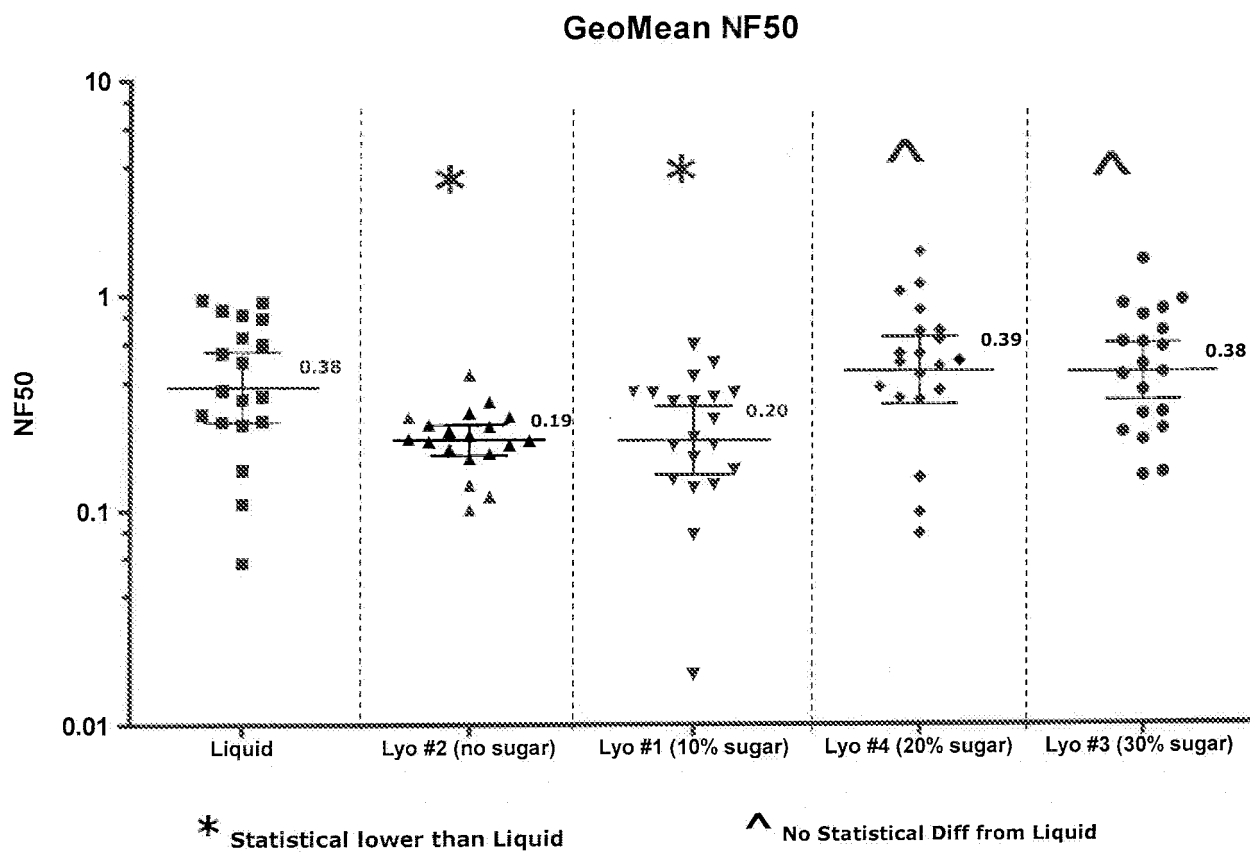


FIG. 7

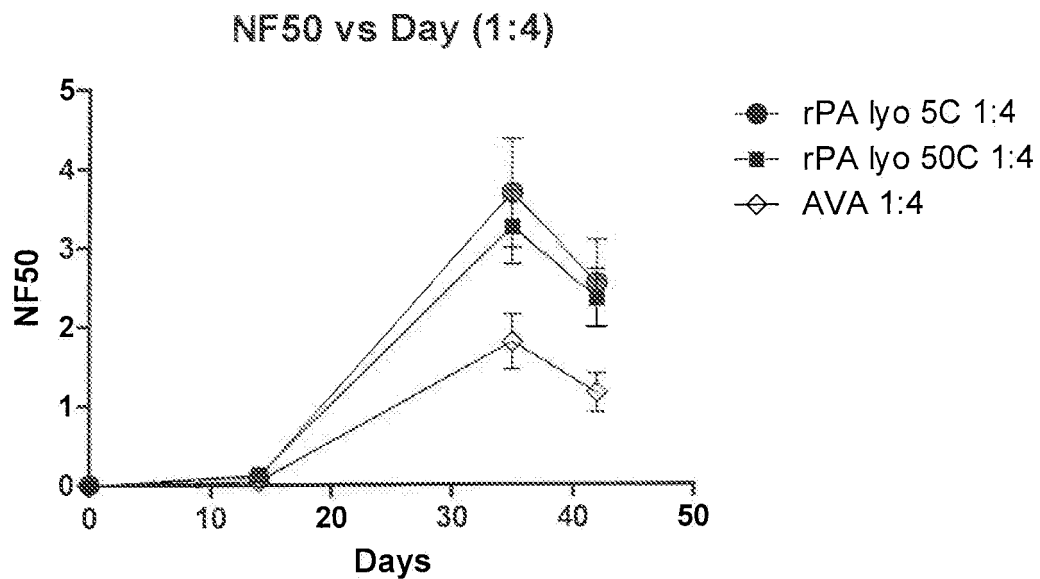


FIG. 8A

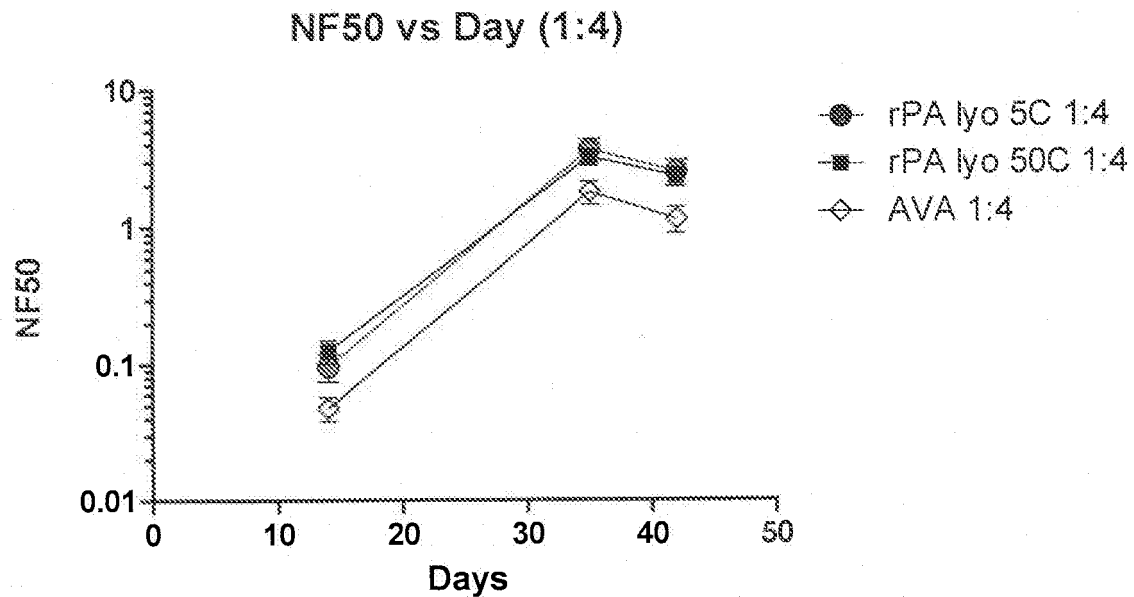


FIG. 8B

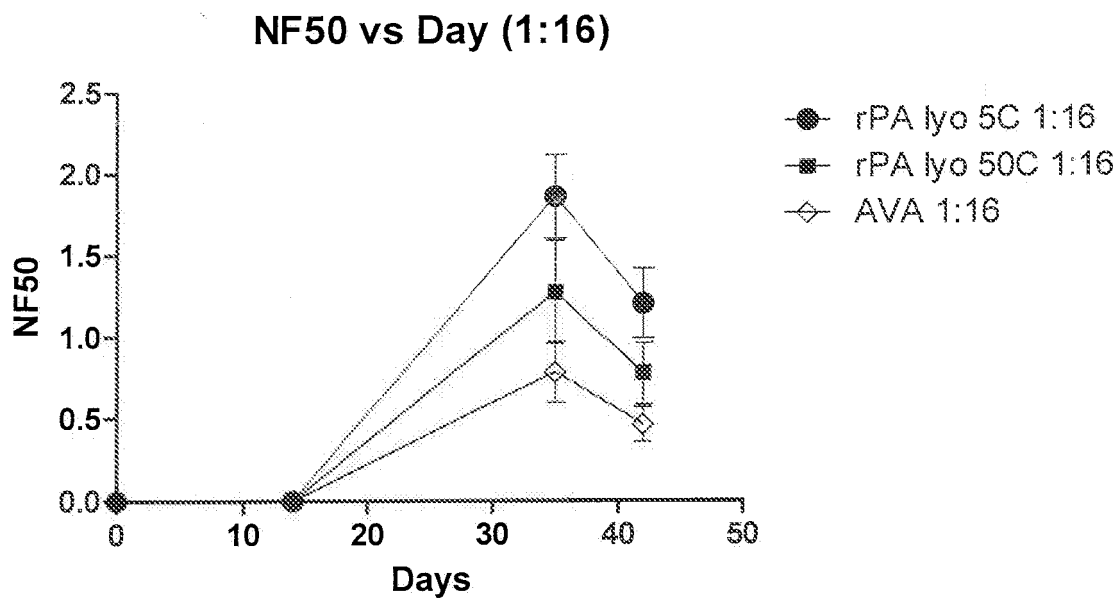


FIG. 9A

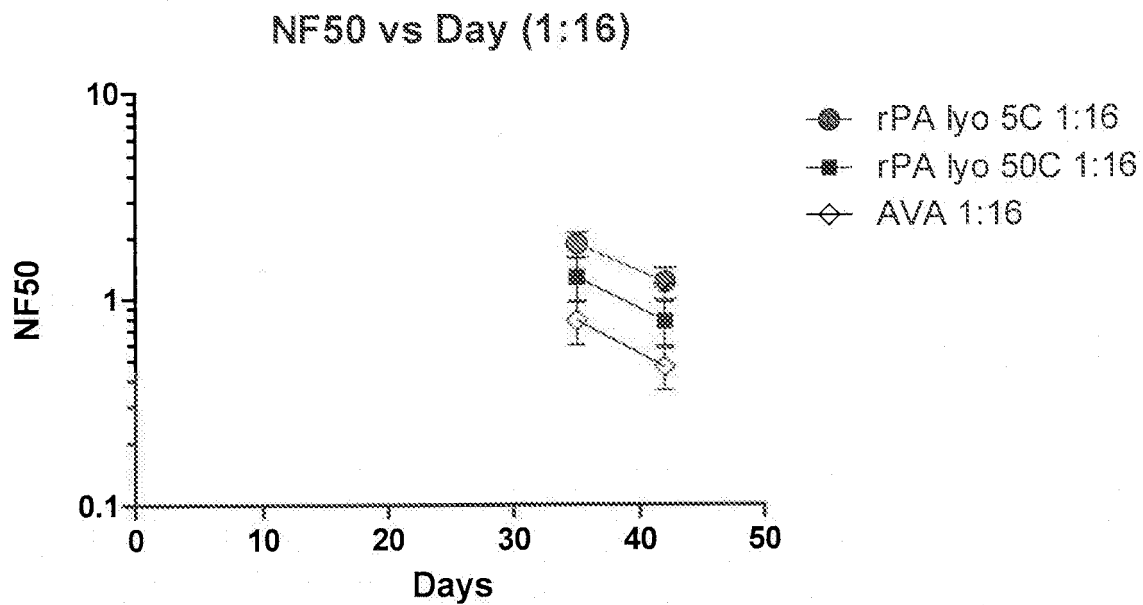


FIG. 9B

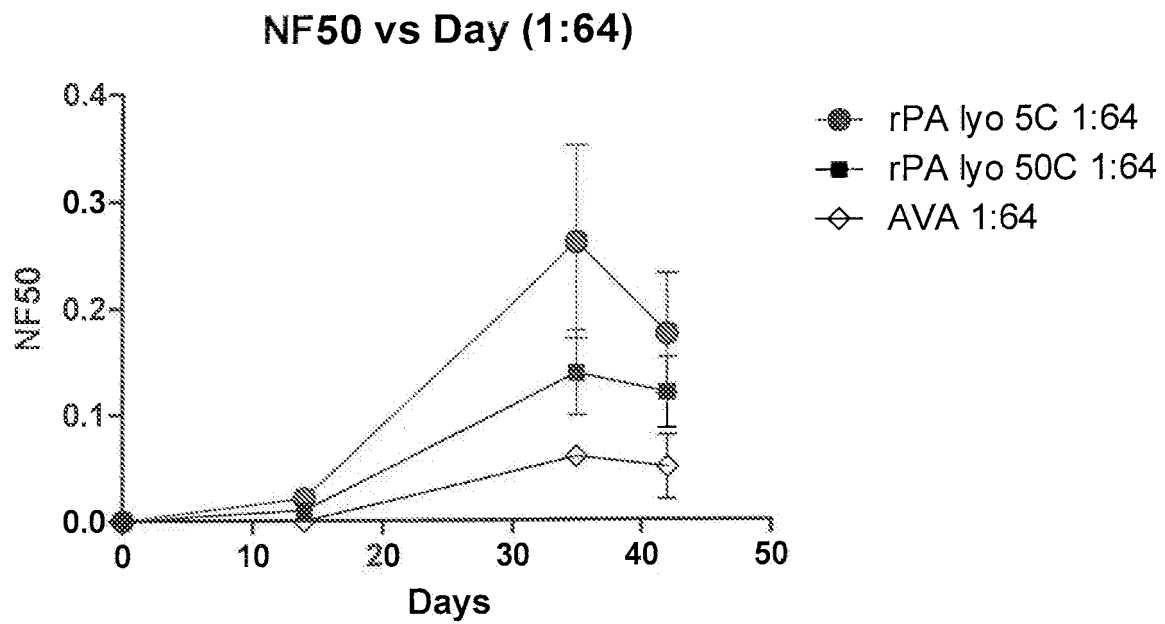


FIG. 10A

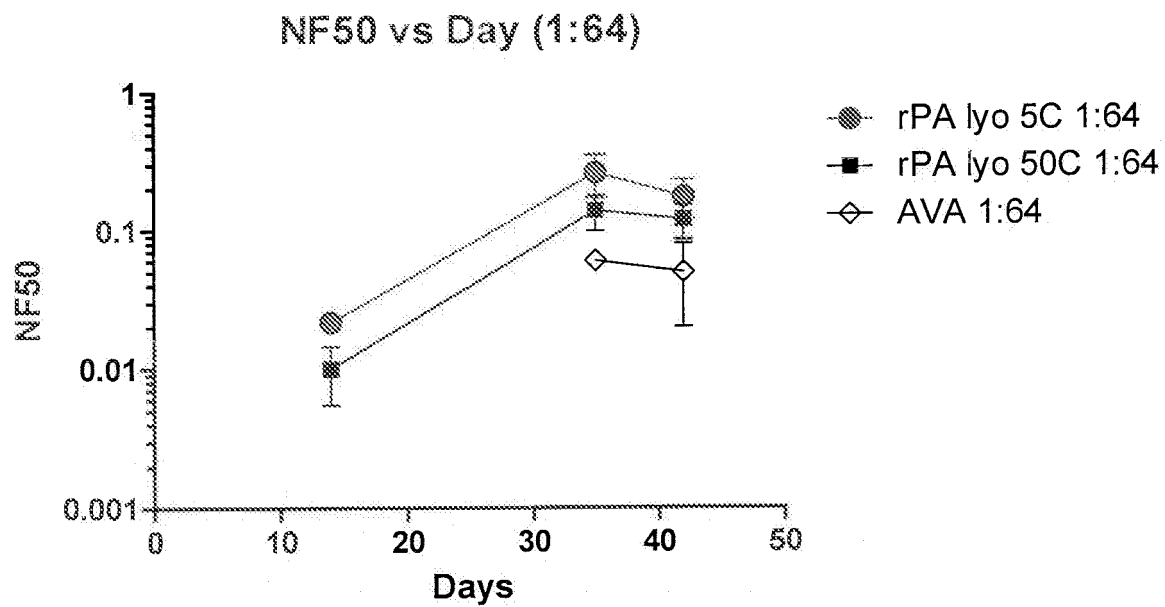


FIG. 10B

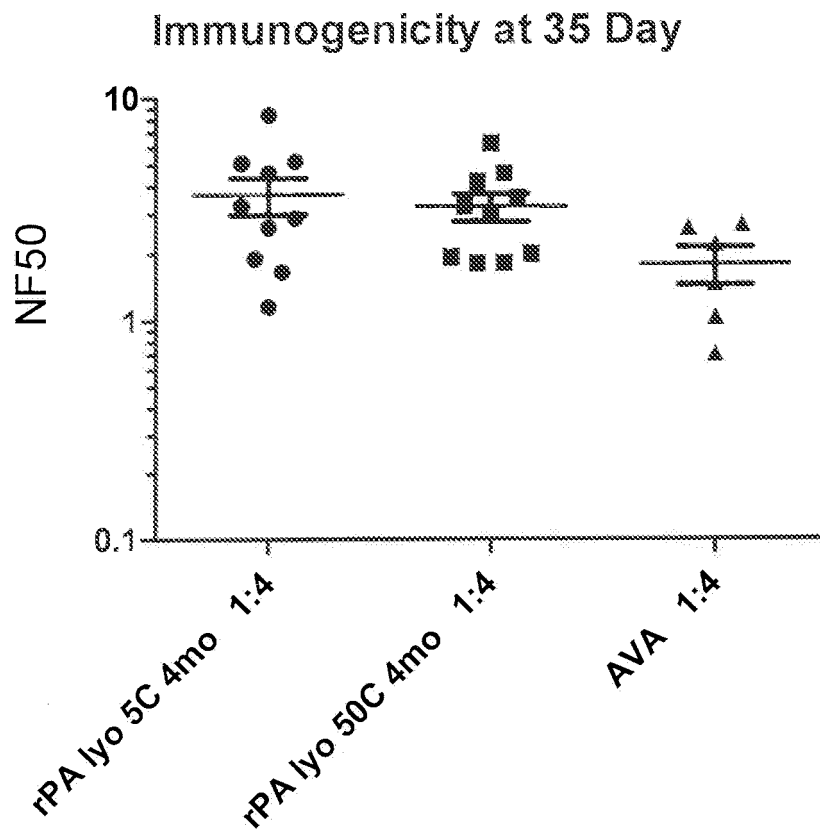


FIG. 11A

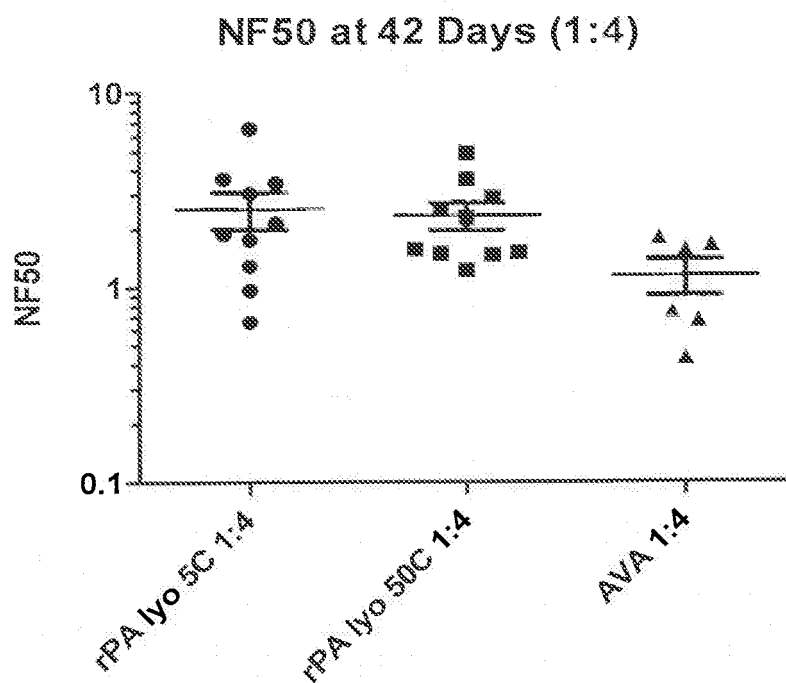


FIG. 11B

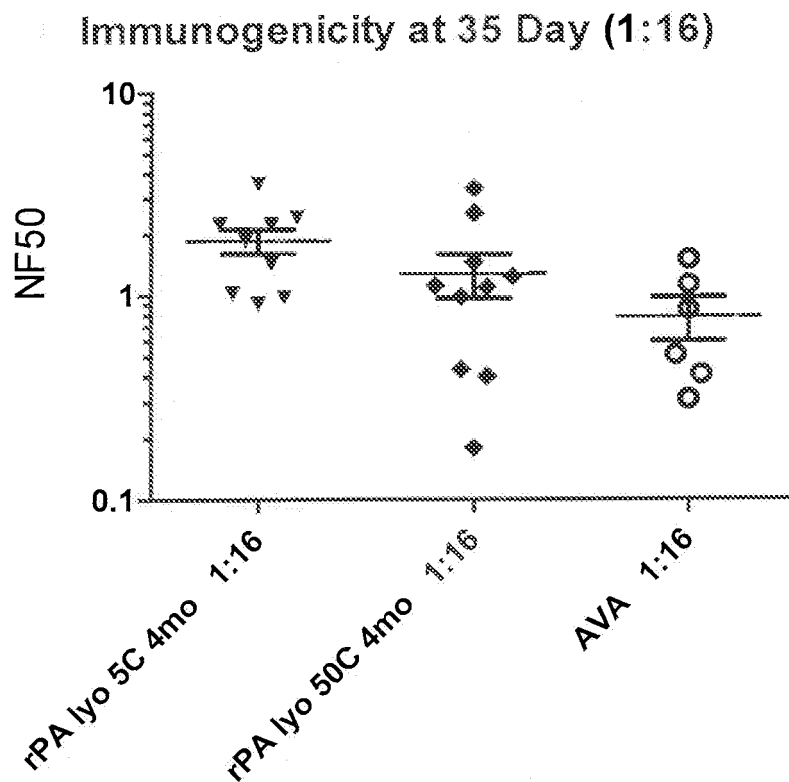


FIG. 12A

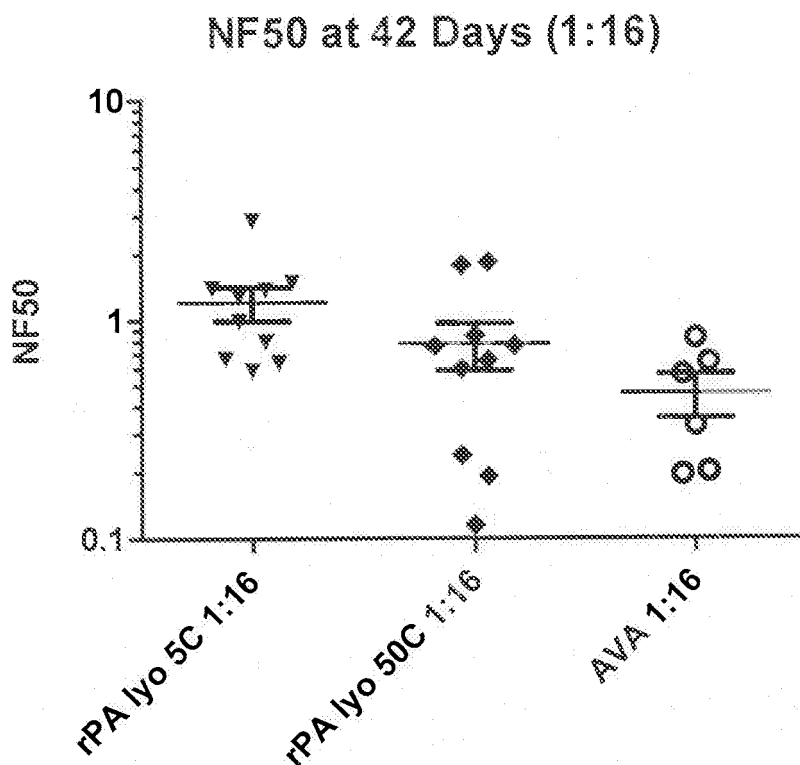


FIG. 12B

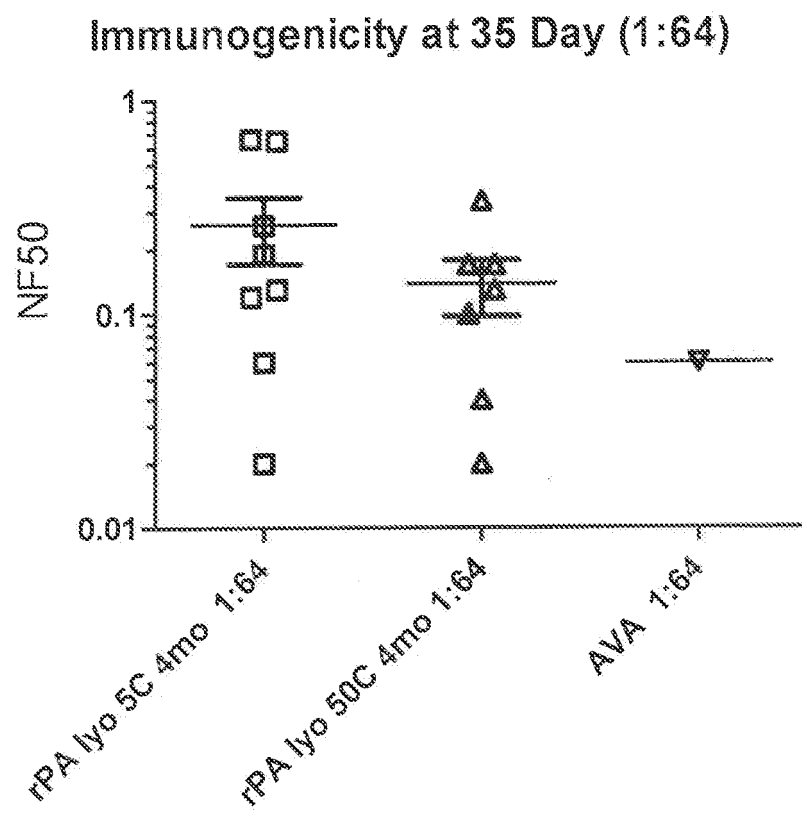


FIG. 13A

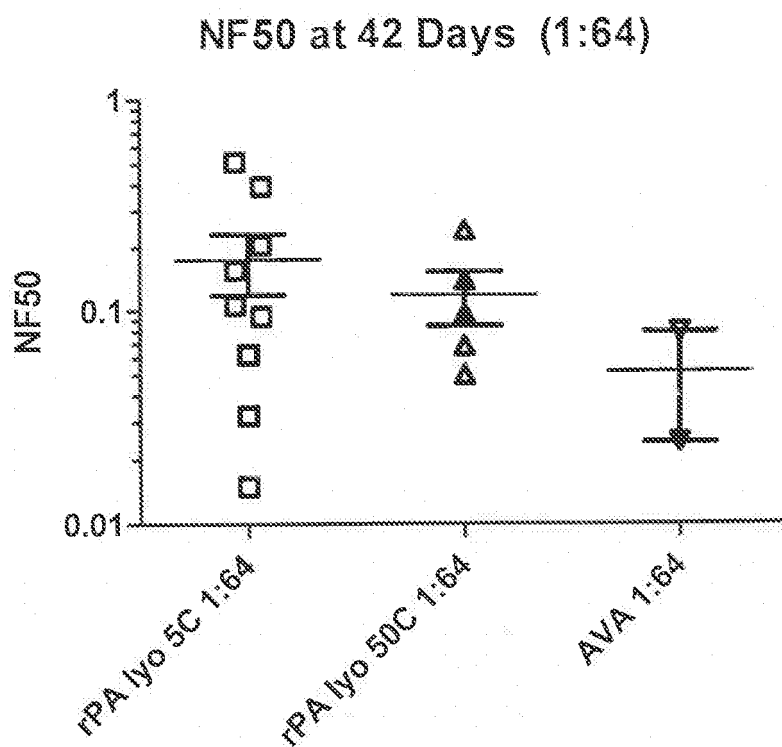


FIG. 13B

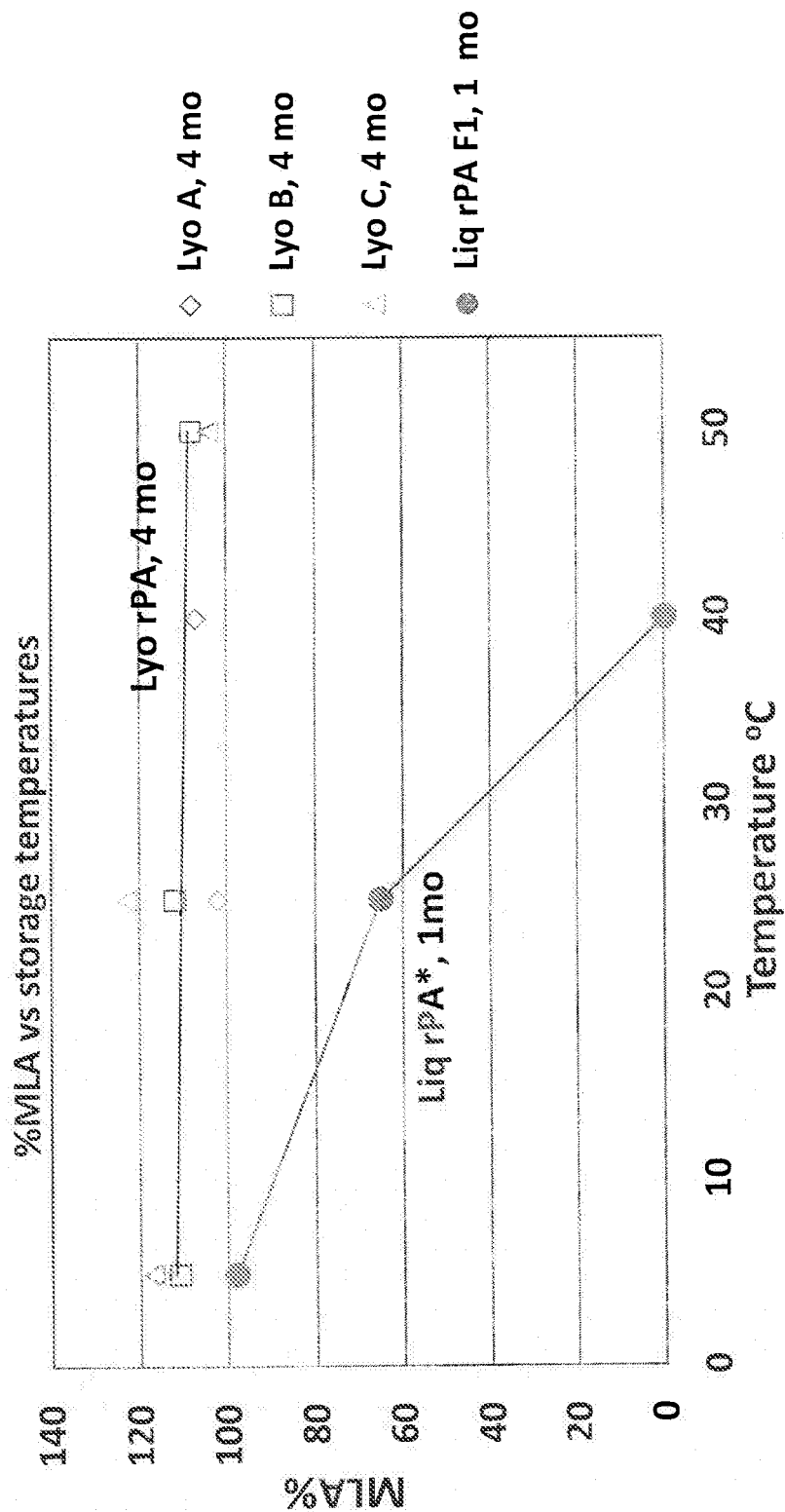


FIG. 14

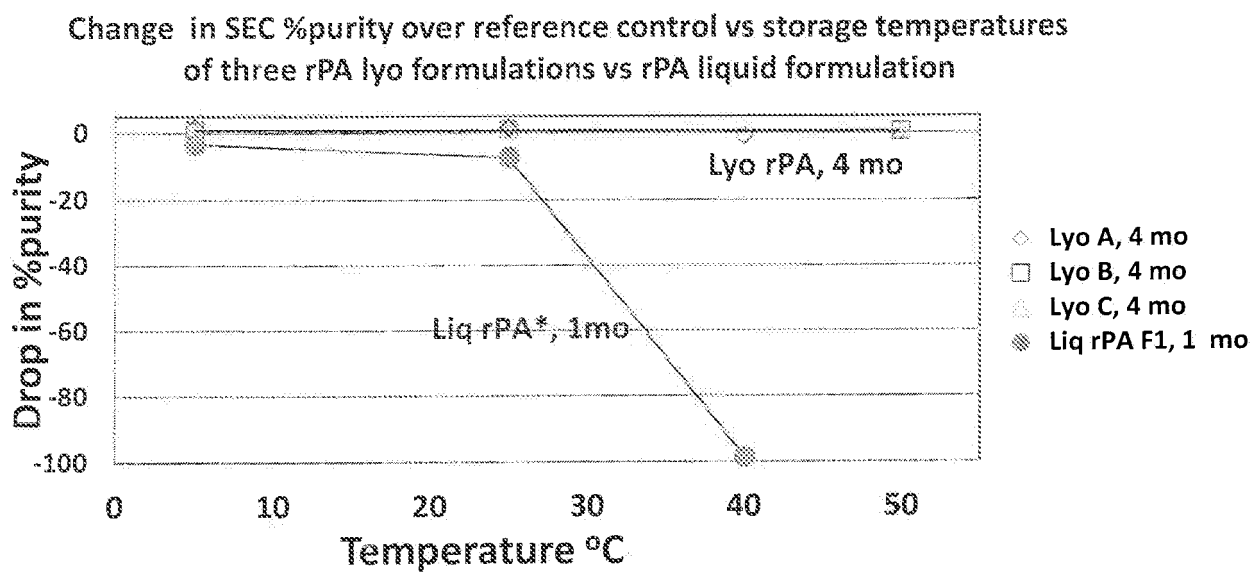


FIG. 15A

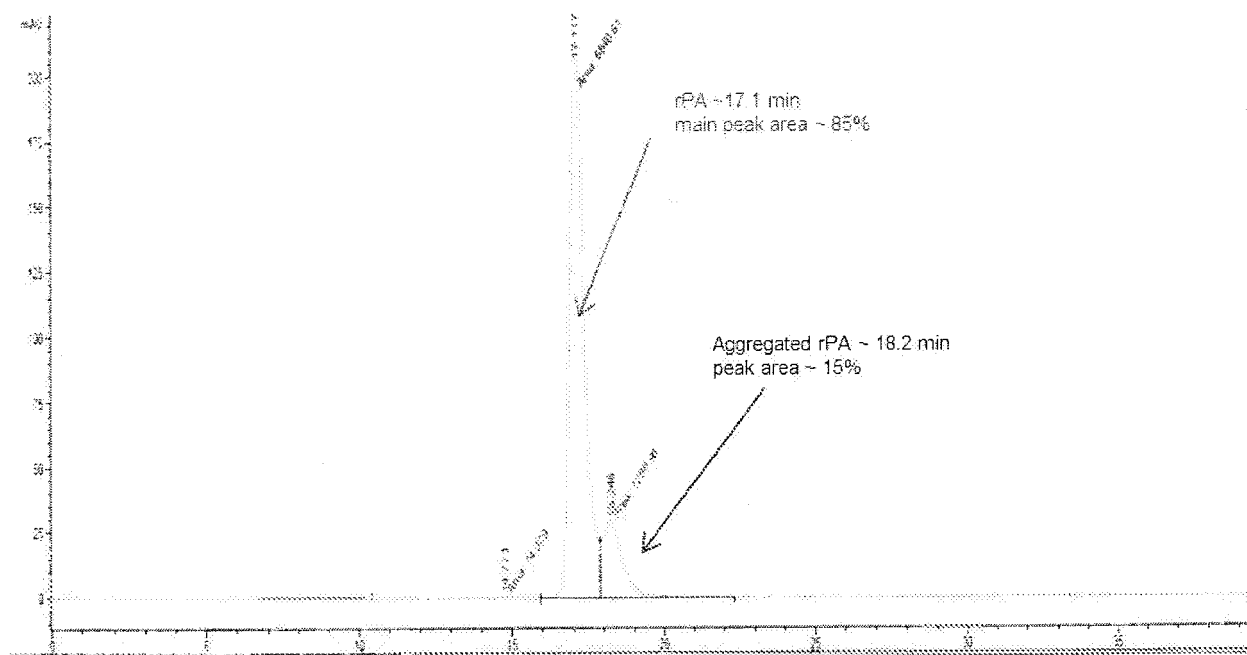


FIG. 15B

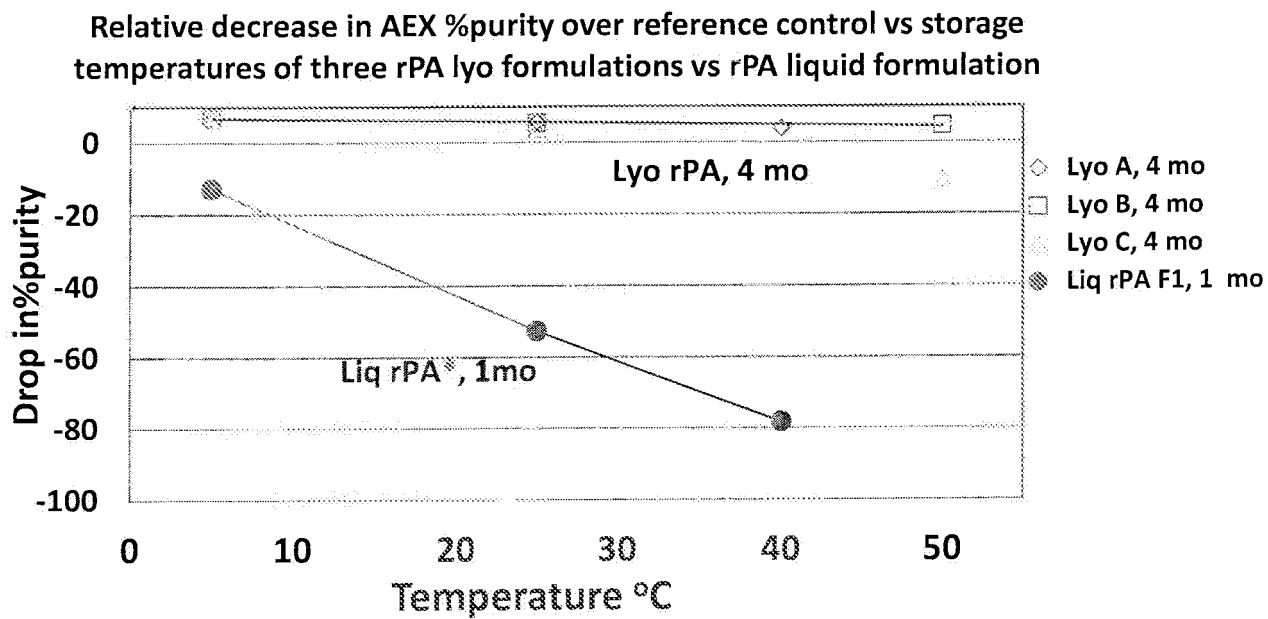


FIG. 16A

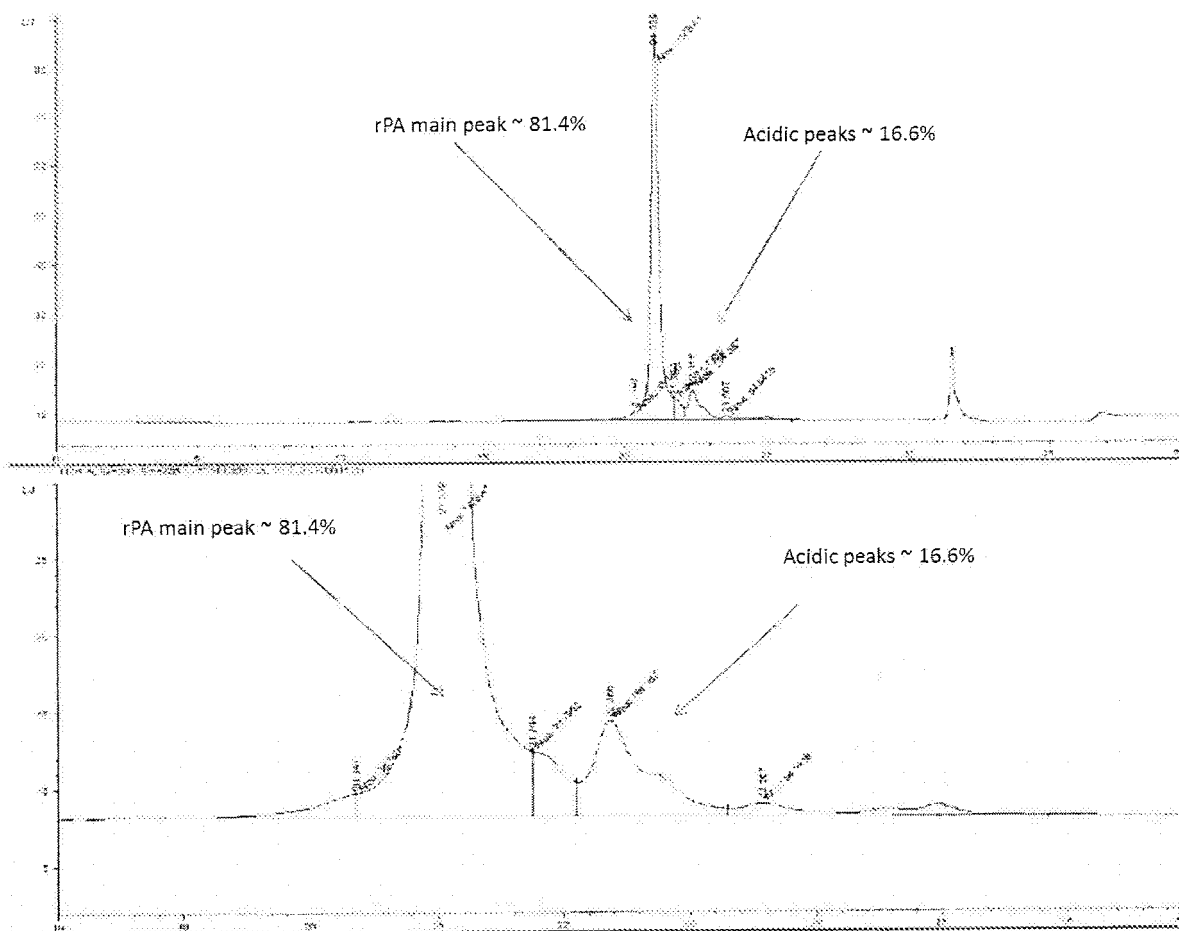


FIG. 16B

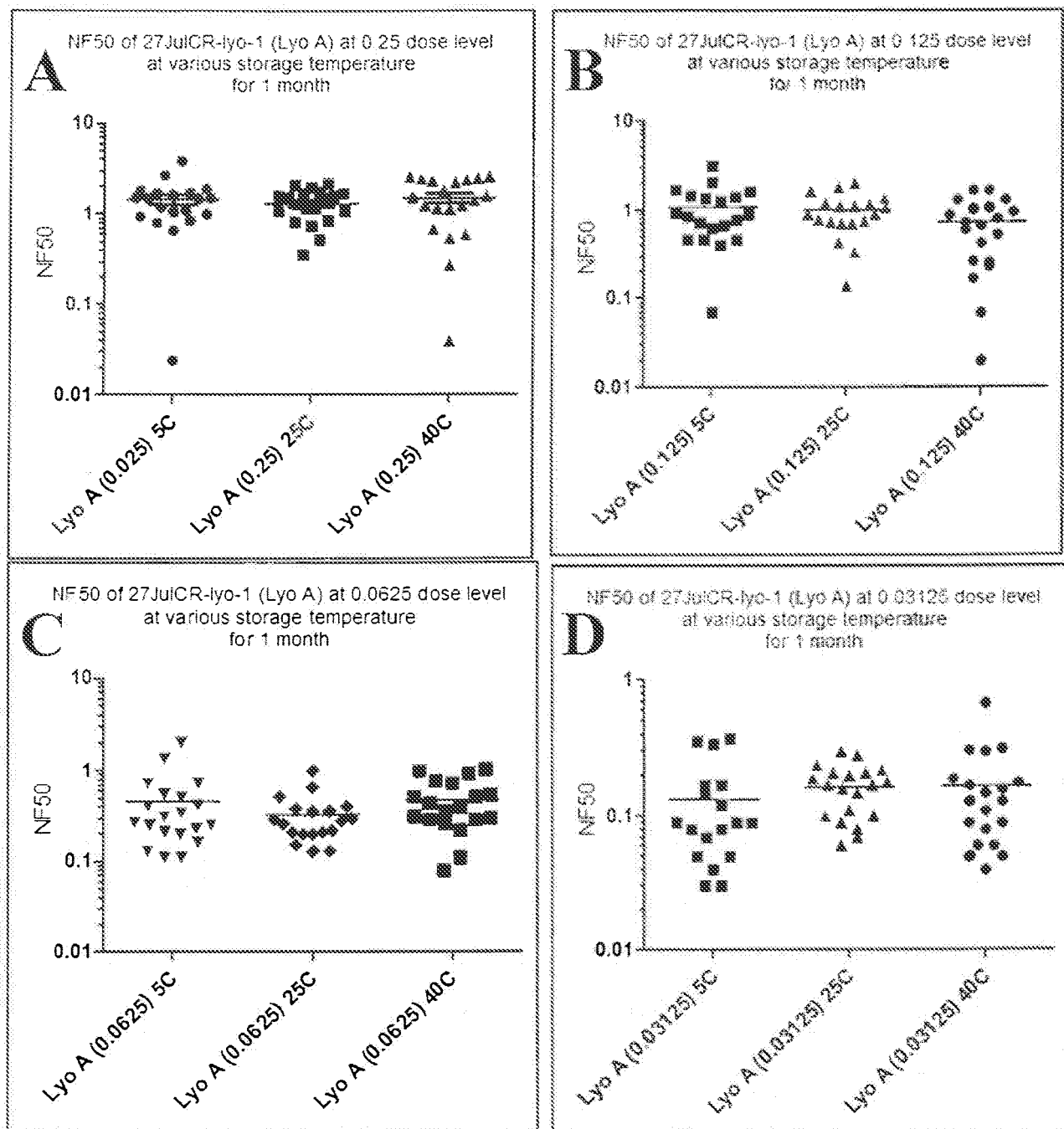


FIG. 17A-D

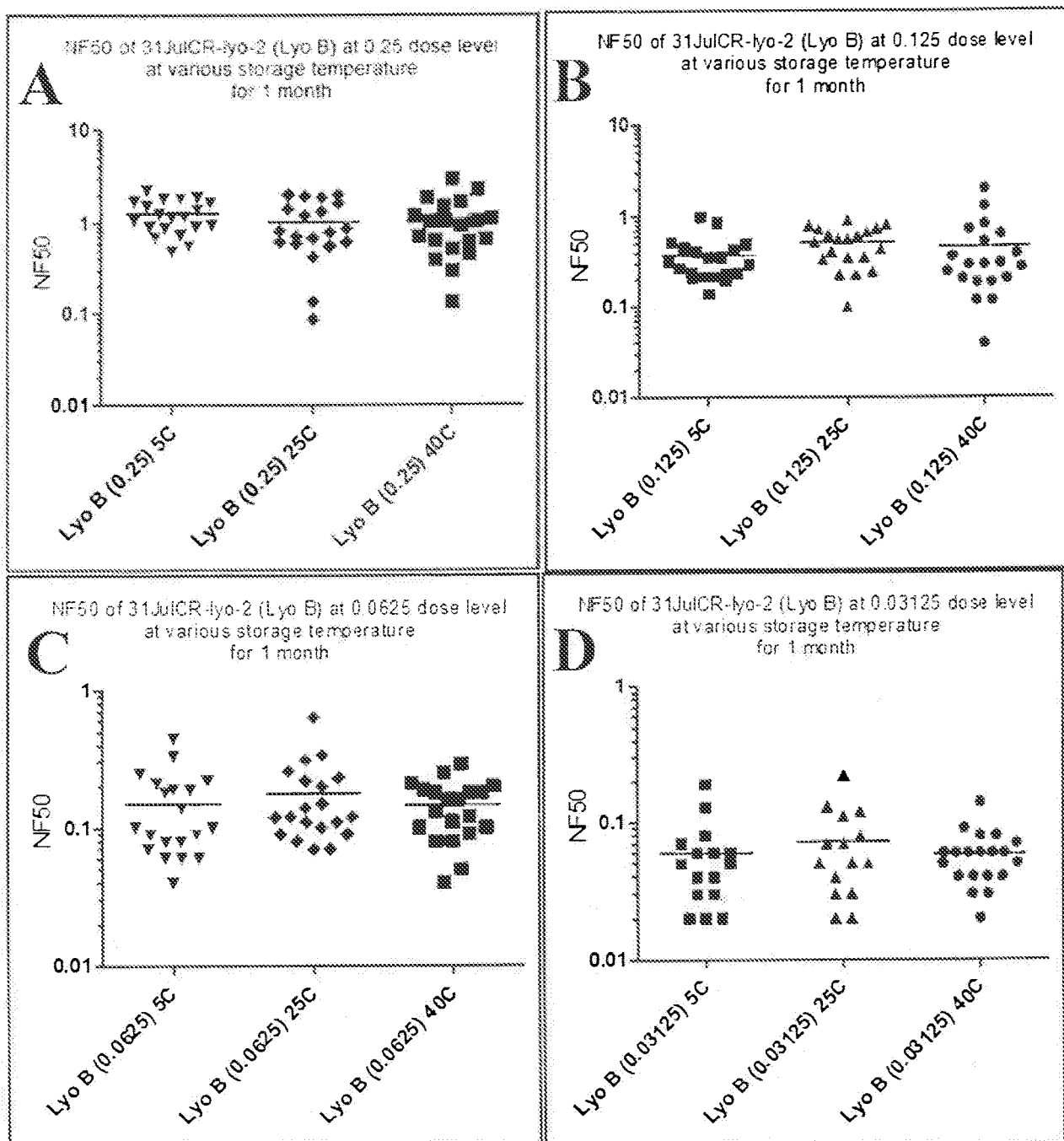


FIG. 18A-D

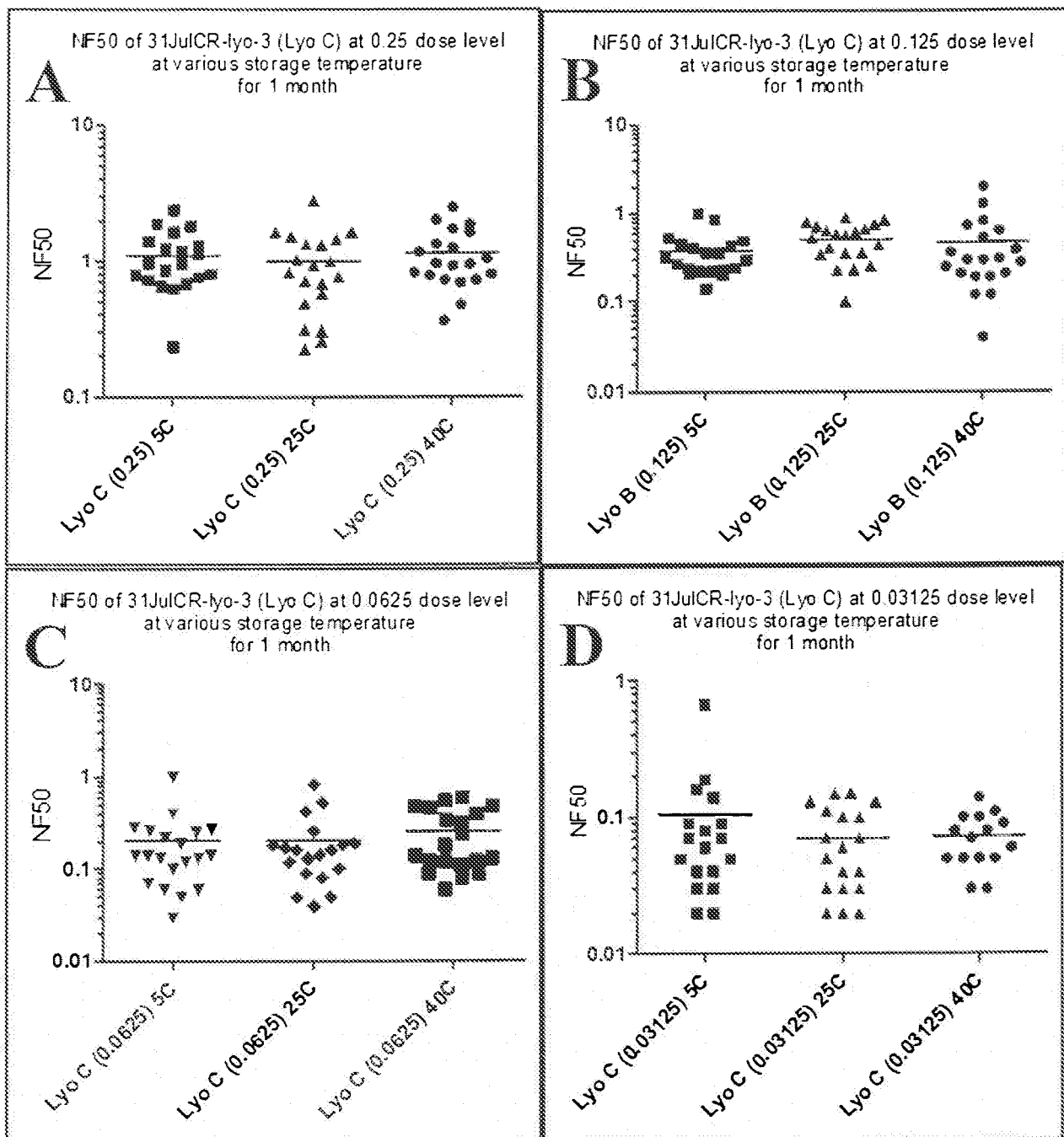


FIG. 19A-D

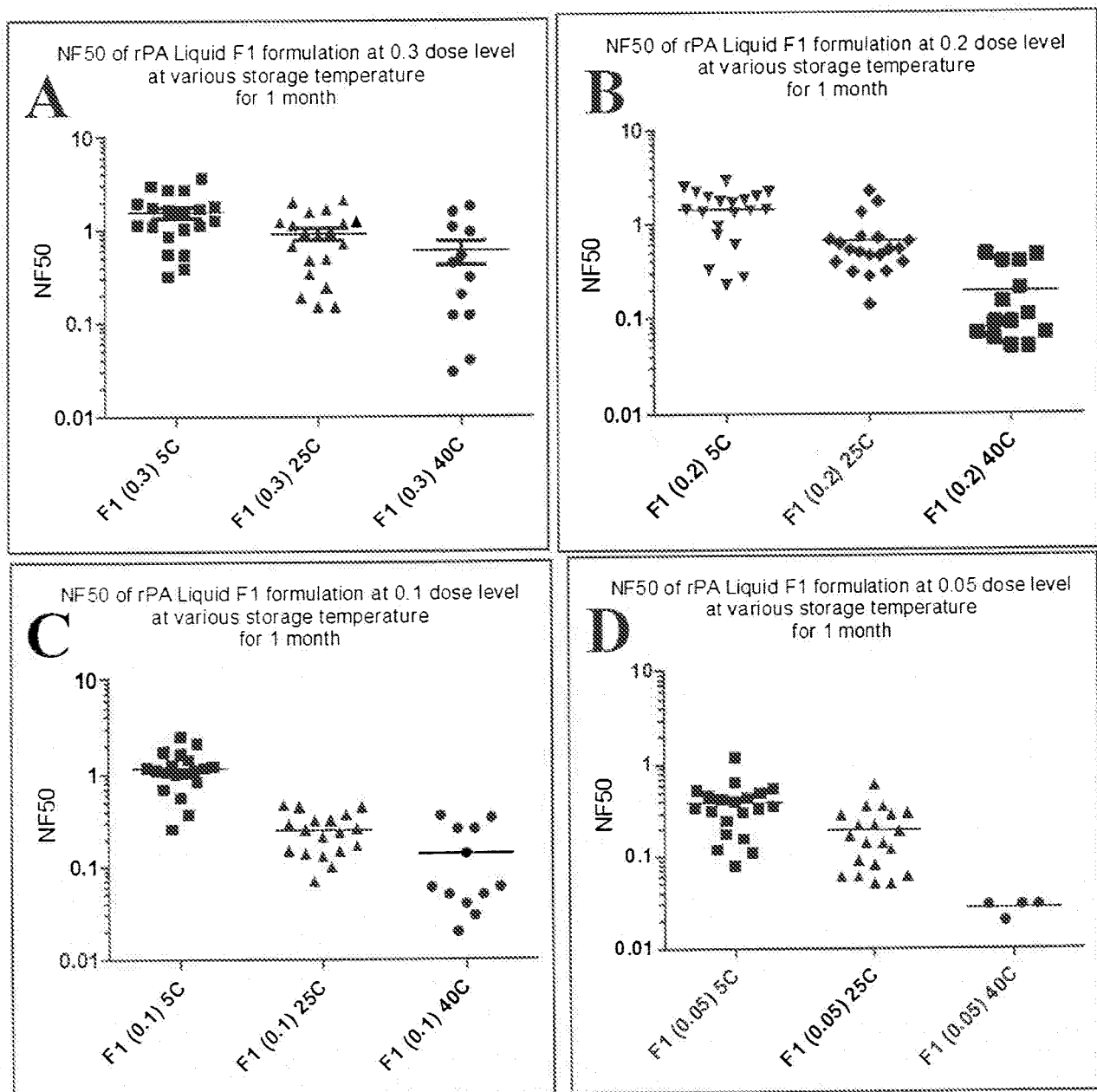


FIG. 20A-D

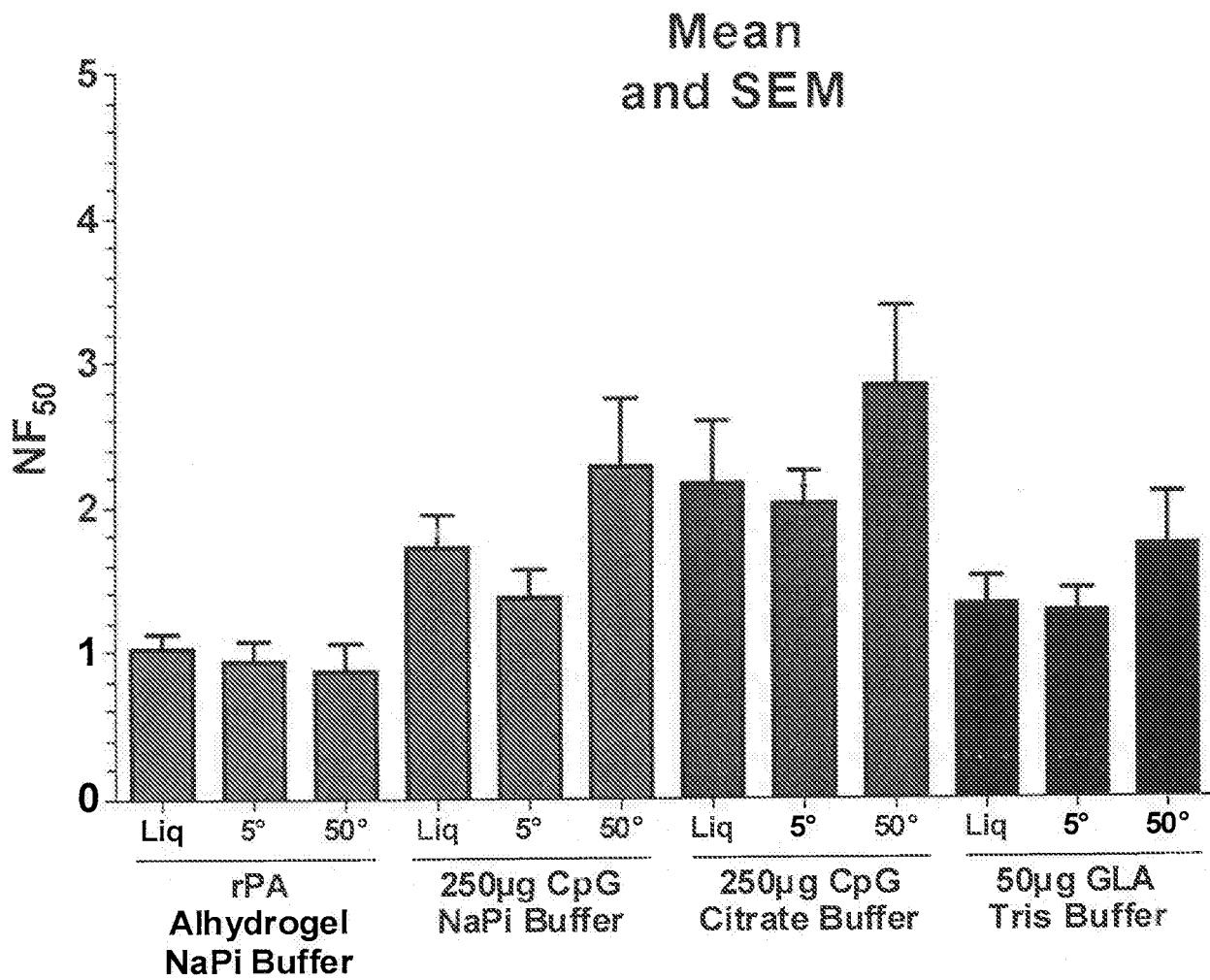


FIG. 21