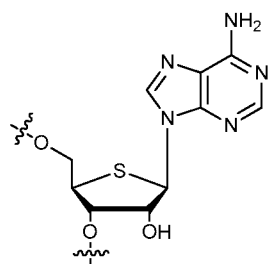
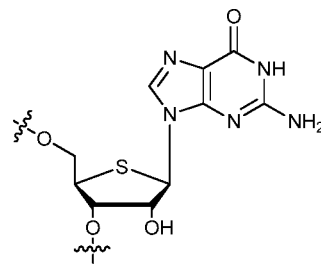


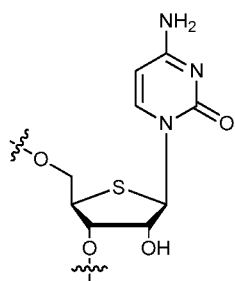
FIG. 1



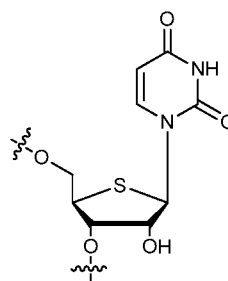
4'Thio-Adenosine



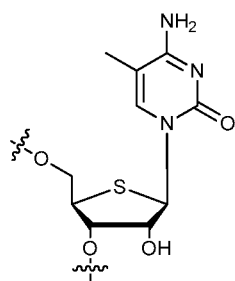
4'Thio-Guanosine



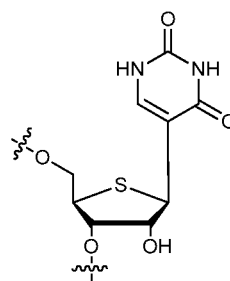
4'Thio-Cytidine



4'Thio-Uridine



4'Thio-5-Methyl-Cytidine



4'Thio-Pseudouridine

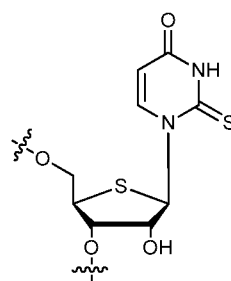
4'Thio-2-Thiouridine
or
2,4'-Dithiouridine

FIG. 2

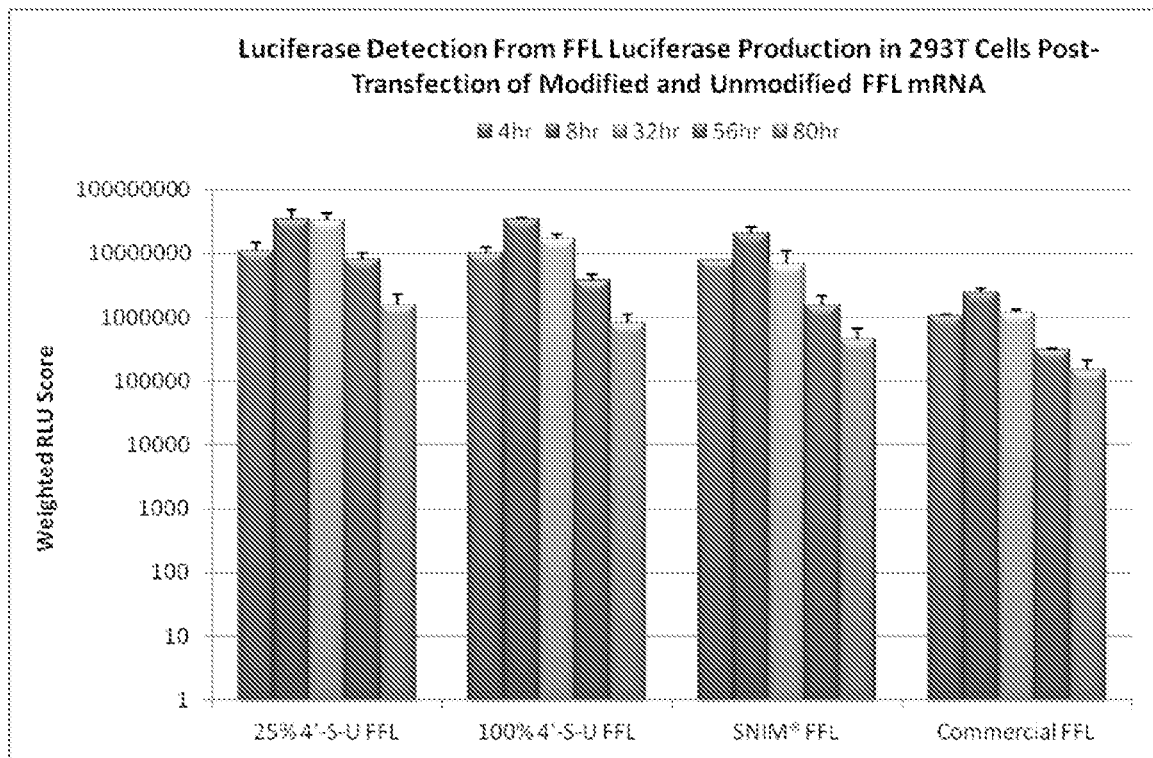


FIG. 3

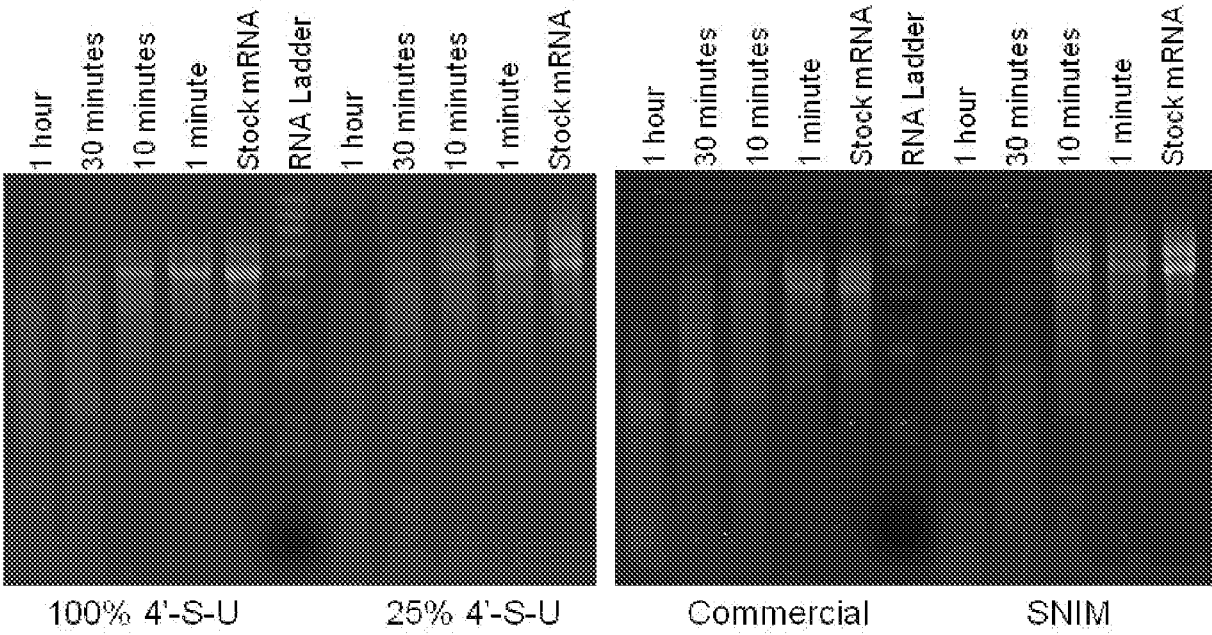
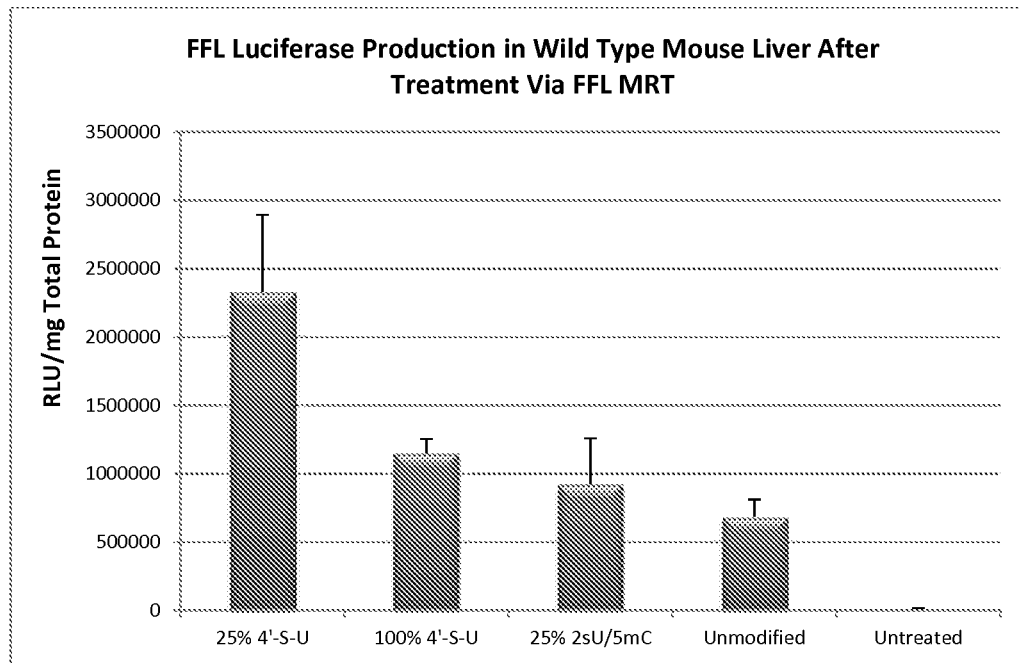


FIG. 4



C12-200-loaded lipid nanoparticles dosing various modified and unmodified FFL mRNA in WT mice. 1.0 mg/kg dose was administered intravenously and livers were analyzed six hours post-administration.