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(54) **Title**: FUCOSYLATION-DEFICIENT CELLS

(57) **Abstract**: An isolated nucleic acid encoding an FX protein having a serine at position 79, a lysine at position 90, a leucine at position 136, an arginine at position 21 1, a serine at position 289, and a combination thereof is provided. Cells having a gene encoding a modified FX protein are provided, wherein the cells exhibit a reduced ability to fucosylate a glycoprotein at a first temperature, but exhibit the ability to fucosylate the glycoprotein at a second temperature. Methods and compositions for making glycoproteins with reduced fucosylation are provided.