Soybean as a Protein Biofactory Platform to Produced Epidermal Growth Hormone

**Title:** Soybean as a Protein Biofactory Platform to Produce Epidermal Growth Hormone

**Invention:** The invention is a soybean capable of producing Epidermal Growth Hormone as a therapeutic agent for a number of applications including reduction of necrotizing enterocolitis (NEC).

**Background:** NEC is a dangerous condition that occurs in about 10% of premature infants. NEC often requires treatments like surgical removal of diseased and dead tissues. Epidermal growth factor (EGF), which is typically found in bodily fluids like amniotic fluid and breast milk, is known to help reduce the onset of NEC in premature infants. This invention provides a novel method to create human EGF through biological manipulation of soybeans.

**Applications:**
- Necrotizing enterocolitis
- Cosmetic skin agent
- Sealing of intestinal walls
- Healing of wounds and diabetic skin ulcers

**Advantages:**
- Bioactive
- Comparable to commercially available human EGF

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