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Title: Transcutaneous iontophoretic delivery of STAT3 siRNA using layer-by-layer chitosan coated gold nanoparticles to treat melanoma

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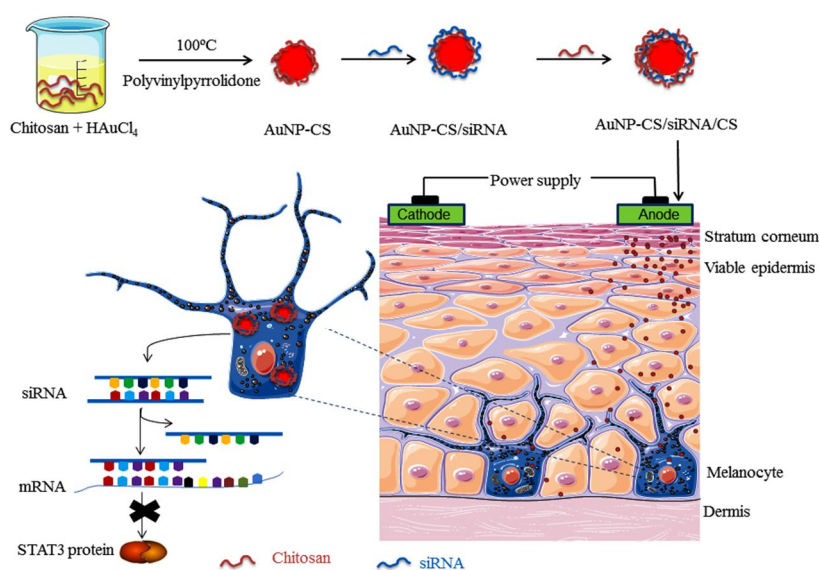
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Highlights:

- siRNA loaded LbL-AuNP are stable in PBS and cell culture medium containing 2% FBS.
- siRNA suppressed the STAT3 protein leading to apoptosis of B16F10 melanoma cells.
- Cell uptake of LbL-AuNP is through clathrin mediated endocytosis pathway.
- Iontophoresis enhanced the skin penetration of LbL-AuNP to reach viable epidermis.

Graphical abstract



siRNA entrapped layer-by-layer gold nanoparticles for transcutaneous delivery

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