

**Technology:** [Production and delivery of a stable collagen](#)

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**Location:** Palo Alto, CA

**Topic:** Immunology

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The VA has a joint ownership interest with The Board of Trustees of the Leland Stanford Junior University

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**Abstract:** Improved methods are provided for the recombinant synthesis of collagen, particularly collagen VII, in host cell, and for therapeutic delivery of the same. The recombinant collagen is produced in a host cell that has increased levels of prolyl-4-hydroxylase, relative to basal cell levels. The collagen produced by the methods of the invention has increased numbers of modified proline residues, relative to a recombinant collagen produced in a host cell having basal levels of prolyl-4-hydroxylase. The increased proline modification provides for a collagen having increased stability, including increased in vivo stability.