RAPID RESPONSE TO PANDEMIC INFLUENZA
USING A LICENSED RECOMBINANT SEASONAL INFLUENZA VACCINE MANUFACTURING PLATFORM

Penny L. Post, Protein Sciences Corporation
penny.post@proteinsciences.com

Key Words: influenza, vaccine, recombinant, pandemic, baculovirus

Protein Sciences Corporation uses the baculovirus expression system technology (BEST) to produce novel vaccines. The BEST provides advantages of speed, cost, and safety. It is generally considered a safe production system, with limited growth potential for adventitious agents that can infect humans. Our Biologics License Application for Flublok®, a recombinant trivalent hemagglutinin (rHA) vaccine produced using BEST, was approved by the FDA on January 16, 2013, making this product the first licensed recombinant influenza vaccine. The method used to manufacture Flublok has the potential for faster start-up of the manufacturing process than traditional egg-based vaccine methods in order to rapidly respond to emerging seasonal or pandemic influenza strains. Additional advantages of this expression system include: elimination of the need to handle live viruses (particularly a concern for pandemic influenza) and production of authentic antigen that does not require egg-adaptation. This talk will describe the platform technology used to produce our seasonal influenza vaccine and its application to pandemic vaccines.