



Oxford Expression Technologies Introduces *flashBACULTRA*[™] for Improved Protein Yield and Quality

New Vector Increases Production and Quality for One-Step Baculovirus Protein Expression

Oxford Expression Technologies Ltd (OET), a leading provider of baculovirus-based protein expression products and services, has introduced *flashBACULTRA*[™], a new baculovirus vector for increased yield and improved quality of expressed protein. *flashBACULTRA*[™] is the Company's latest addition to its *flashBAC*[™] portfolio of products, which enable the production of multiple recombinant viruses in a one-step process. *flashBACULTRA*[™] is the only baculovirus vector on the market to incorporate the deletion of chitinase, cathepsin, p10, p74 and p26 genes from the virus genome, resulting in superior expression and yield.

OET's expression suite of *flashBAC*[™] products includes *flashBACGOLD*[™] and *flashBACULTRA*[™], which have a number of benefits compared with other baculovirus expression systems, including reduced proteolysis, increased recombinant protein transcription from the polyhedrin promoter, more efficient transport through the endoplasmic reticulum and decreased overall genetic load on the virus genome.

These factors result in the following advantages for researchers:

- Increased cellular stability and longevity
- Increased recombinant protein yield, including difficult-to-express secreted and membrane-targeted proteins
- Increased recombinant protein quality
- Reduced timelines for protein expression

One of the most popular protein expression methods is to use baculoviruses (insect-specific viruses) in insect cells in culture — the gene of interest is inserted into the virus, which infects the cultured insect cells and uses the internal mechanism of the cell to make the protein. Because insects are very close to humans in their genetic make up, the proteins produced are almost identical to human proteins. A baculovirus is a virus that replicates in the cells of butterflies, moths and caterpillars. OET's propriety

flashBAC[™] technology uses a genetically engineered form of the virus to enable the infected moth cells in culture to produce large amounts of a given protein through its natural method of replication making it a suitable vector for small and large scale protein expression systems.

“Our new system allows scientists to produce proteins faster, more easily and cost-effectively using automated and high-throughput methods — aiding the development of new drugs and more targeted research for understanding how proteins work in health and disease,” commented James Bernard, acting CEO of OET. “*flashBACULTRA*[™] includes additional modifications to the virus genome that further enhance the secretion and yield of high quality recombinant proteins.”

For more information, please visit: <http://www.oetltd.com/>

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For a high resolution image please contact College Hill



Notes to the editors

A baculovirus is a virus that replicates in the cells of Lepidopteran insects – butterflies and moths. With genetic engineering the virus can enable the insect cells in culture to produce large amounts of a given protein through its natural method of replication making it a suitable vector for small and large scale protein expression systems.

Insect cells allow the production of recombinant protein that is antigenically, immunogenically, and functionally similar to the native mammalian protein.

Baculoviruses have a restricted host range, limited to specific invertebrate species. They are safer to work with than mammalian viruses since they are non-infectious to vertebrates.

About Oxford Expression Technologies

Oxford Expression Technologies (OET) is a biotechnology company and centre of excellence for baculovirus protein expression. Specialising in the use of the baculovirus expression vector system, a eukaryotic expression system that can express a large variety of recombinant proteins, OET provides protein expression products, services and consultancy to many global pharmaceutical companies. The company was founded in 2000 from a collaboration between Oxford Brookes University and the Natural Environment Research Council to provide researchers with custom proteins for research purposes. For further details about the Company's services and products, please visit <http://www.oetltd.com/>

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