*Trans*IT®-Insect Transfection Reagent

Insect cell expression is a platform used to produce proteins with simple post-translational modifications. *Trans*IT®-Insect Transfection Reagent is an animal origin-free reagent that is specifically optimised for high gene expression in a variety of insect types that offers:

- Exceptionally DNA Delivery – in insect cell types including Sf9, High Five and S2
- High Baculovirus Production – ideal for baculovirus expression in insect cells
- Serum compatibility – non-liposomal, anuimal-origin free formulation that eliminates media change

ALSO AVAILABLE – *flashback*™ Baculovirus Expression Systems and pOET Insect and BacMam Transfer Plasmids for baculovirus production and protein expression in insect or mammalian cells.

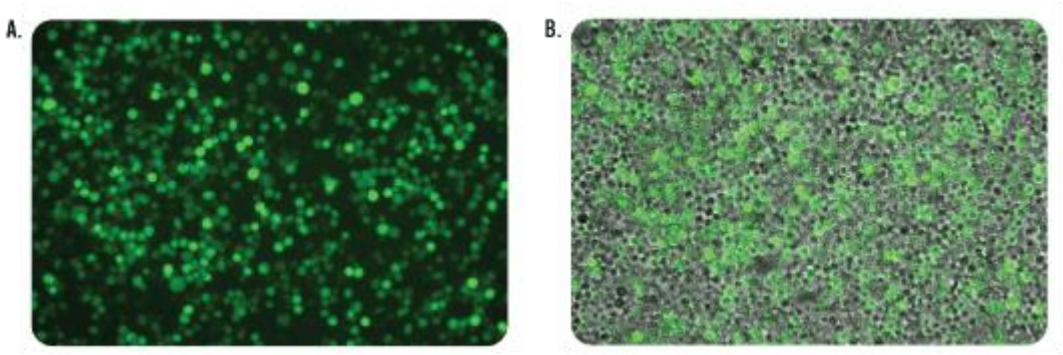

Figure 1. Efficient Transfection of Baculovirus Genomic DNA using *Trans*IT®-Insect Reagent. Transfections were performed in 6-well plates with 5 x 10^5 Sf9 cells per well using *Trans*IT®-Insect Transfection Reagent at the reagent-to-total DNA ratio of 3:1 (µl:µg). Cells were co-transfected with 0.5 µg of ProGreen™ baculovirus genomic vector DNA (AB Vector) encoding green-fluorescent protein (GFP) and 0.1 µg of pVL1393 transfer vector (AB Vector). (A) Fluorescence and phase contrast images were taken at 6 days post-transfection using a Zeiss S100 fluorescent microscope. Merge shown in (B)

Geneflow Limited, Paul Fisher House, 1 The Sycamore Tree, Elmhurst Business Park, Lichfield, Staffs, WS13 8EX
Tel: 01543 414704, Fax: 01543 255666, Email: sales@geneflow.co.uk, Web: www.geneflow.co.uk

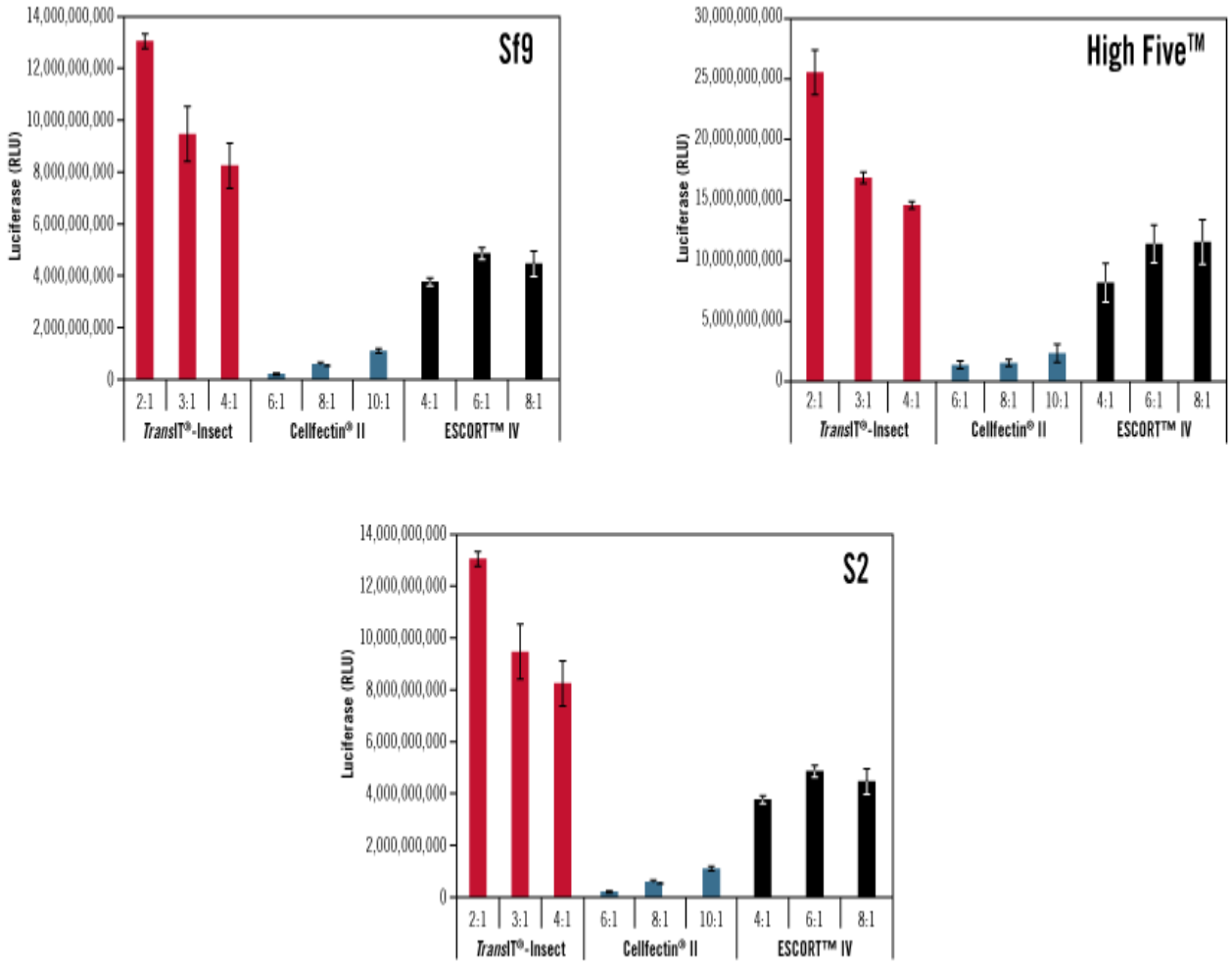

Figure 2. *Trans*IT®-Insect Outperforms Competitor Transfection Reagents. Insect cell lines (A) Sf9, (B) High Five™, and (C) *Drosophila*S2 cells were transfected in 96-well plates with 0.1 µg of a luciferase expression plasmid driven by an hr5 enhancer/IE1 promoter using the designated reagent at the indicated reagent-to-DNA ratios (µl: µg). Luciferase expression was measured at 48 hours post-transfection. Sf9 and High Five™ cells were cultured and transfected in serum-free media formulations; S2 cells were in serum containing medium. Error bars represent the standard error of the mean for triplicate wells.

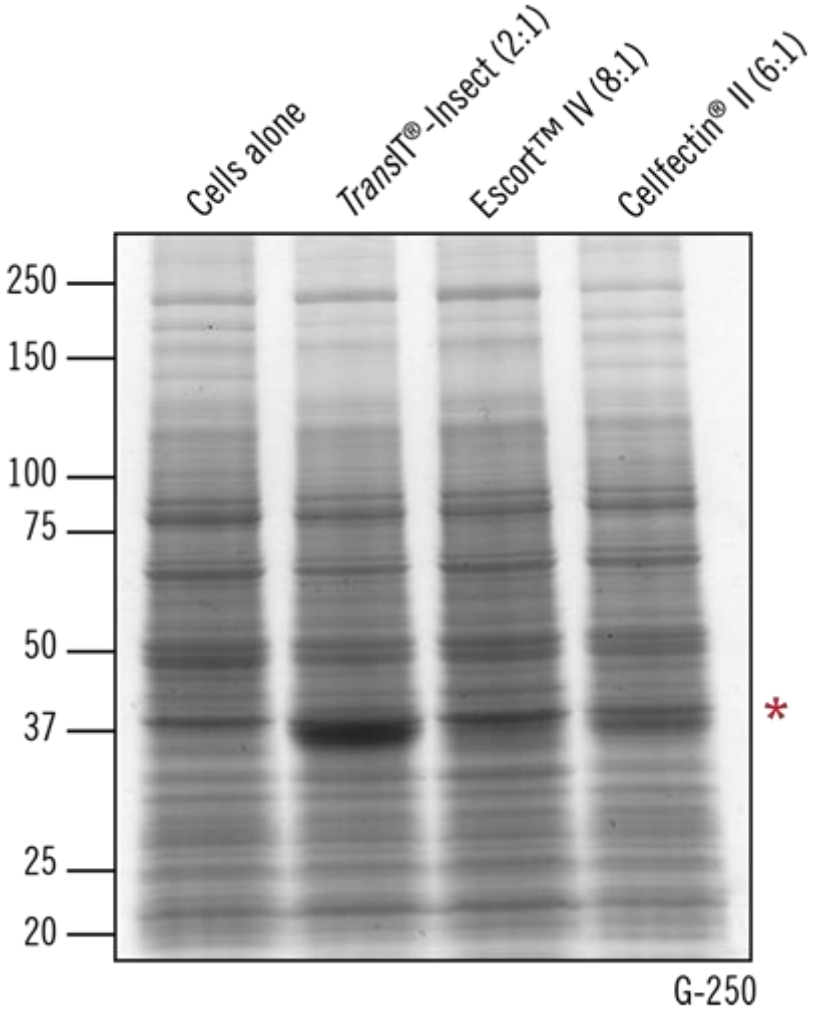

Figure 3. Superior recombinant protein expression in High Five™ cells using *Trans*IT®-Insect. High Five™ cells were transfected in 6-well plates with 2.5 µg of a GFP expression plasmid driven by an hr5 enhancer/IE1 promoter using the designated reagent at the indicated reagent-to-DNA ratios (µl: µg). Total soluble cell lysates were prepared from cells 72 hours post-transfection. Lysates from 100 µl culture were analyzed by SDS-PAGE and Coomassie blue staining; cells alone (untransfected) is shown as control. Expressed GFP containing 6X His, S, and HSV tags (~38 kDa) was clearly detected in the lysate from the cells that were transfected (*) with the highest level of expression observed at *Trans*IT®-Insect:DNA ratio of 2:1

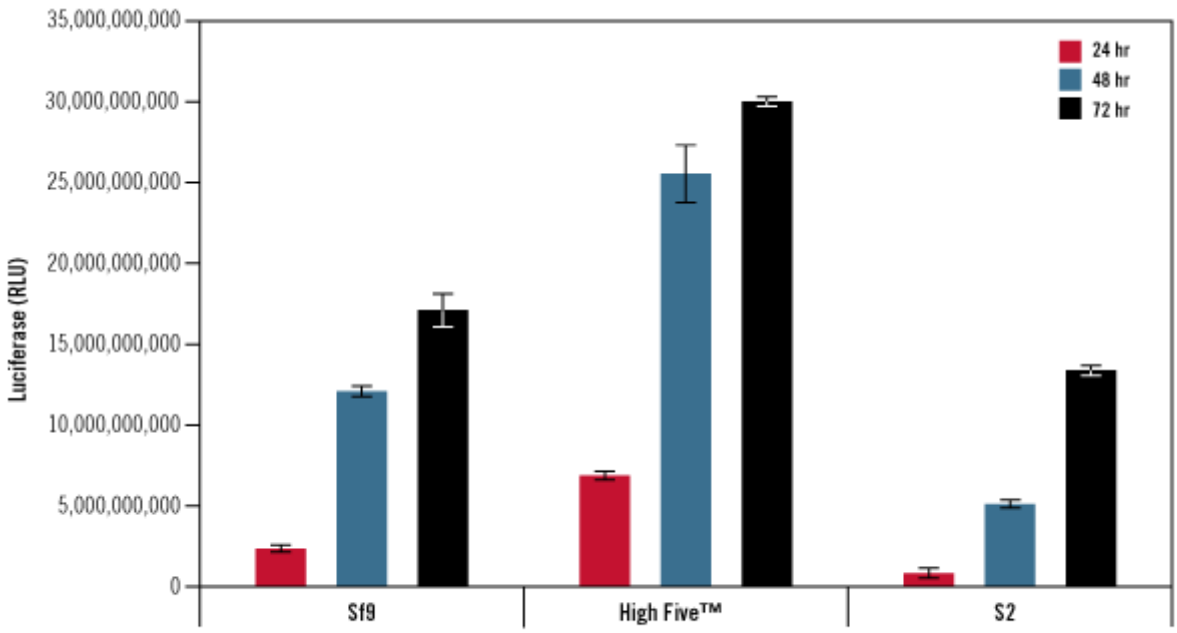

Figure 4. *Trans*IT®-Insect Yields Increased Protein Expression Over Time. Insect cell lines (A) Sf9, (B) High Five™, and (C) *Drosophila*S2 were transfected in a 96-well plate with 0.1 ug of a luciferase expression plasmid driven by an hr5 enhancer/IE1 promoter using the*Trans*IT®-Insect Transfection Reagent at a reagent-to-DNA ratio of 2:1 (µl: µg). Luciferase expression was measured at three time points, 24, 48 and 72 hours post-transfection. Sf9 and High Five™ cells were cultured and transfected in serum-free media formulations; S2 cells were in serum containing medium. Error bars represent the standard error of the mean for triplicate wells