In vivo transfection of Cotesia plutellae bracovirus protein tyrosine phosphatases PTPs into the hemocytes of late fourth instar Spodoptera exigua (Insecta, Lepidoptera).

Department of Bioresource Sciences, Andong National University, Andong, Republic of Korea.

Introduction:
We did not use any cell line that’s because our main target was to introduce DNA or dsRNA into the cells in vivo.

Experimental procedures / transfection protocol:
Briefly, 0.5 microgram of DNA or dsRNA was mixed with 3 microlitres of Metafectine PRO and incubated at room temperature for 20 minutes then injected to late fourth instar Spodoptera exigua larvae. 36 hours post transfection, DNA expression or knock down was analysed by RT-PCR.

Results and discussion:
We got a transfection efficiency of about 60%.

Please also refer to the publications “Transient expression of protein tyrosine phosphatases encoded in Cotesia plutellae bracovirus inhibits insect cellular immune responses” and “Transient expression of an EP1-like gene encoded in Cotesia plutellae bracovirus suppresses the hemocyte population in the diamondback moth, Plutella xylostella” that you find under the menu item “Publications”