

# Pronuclear and Cytoplasmic Injections

This form may be used to request injection of DNA into the pronucleus of one cell mouse embryos.

Keywords: [transgenics](#) [pronucleus](#) [DNA injection](#) [transgene](#)

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This service provides an efficient means of introduction foreign DNA, usually plasmid or BAC derived fusion genes, into the mouse genome. DNA is microinjected into the pronucleus of 0.5 day fertilized mouse embryos. Surviving embryos are transferred to the oviduct of a pseudopregnant recipient and the animals are housed under the protocol number of the investigator but husbandry is provided by the VGER and DAC. The gestation period of the mouse is 19 to 21 days. Pups are born, and will be weaned, tailed and numbered by core personnel at 3-4 weeks of age. The investigator will need to perform DNA isolation and analyze the DNA by PCR or Southern blotting to identify transgenic founders.


The following data may be useful in estimating the number of injection days required to generate transgenic founders. Typically, ~100 embryos are injected per "injection day".

VGER Pronuclear Injection Statistics (Oct. 2008 - December 2015)

DNA type	Embryonic Strain	# constructs injected	Total # transgenic pups	% Transgenic pups / total born
Plasmid or BAC	B6D2	91	271	16%
Plasmid or BAC	C57BL/6	55	126	15%

[Click here to schedule a consultation](#)

## Attachment

 [Pronuclear\\_Injection\\_Form\\_0119.docx](#) - Added on December 18, 2018 at 11:58 AM by Jennifer Skelton