

## **Canine cDNA and Reporter constructs**

### **cDNA expression constructs.**

Full-length cDNA clones are available for several genes expressed in pluripotent cells of the inner cell mass of the canine blastocyst. These are lenti-viral constructs designed by Dr. Aravind Ramakrishnan, at FHCRC, for the purpose of generating canine induced pluripotent stem (ips) cells. Each cDNA was cloned from a blastocyst cDNA library (see our library page), and verified by sequencing, expression and Western blot analysis.

Presently available cDNA vectors:

CMV-cOct3/4  
CMV-cSox2  
CMV-cMyc  
CMVcKLF4.

### **Reporter constructs.**

A lenti-viral construct in which the canine Oct3/4 promoter drives expression of fluorescent reporter, YFP, was developed to track generation of canine ips cells. Additional constructs, using promoters from canine and human Sox2, Klf4, and Nanog are under development and will be available when verified.

Presently available reporter vectors:

cOct3/4-YFP.

### **Future constructs:**

Additional canine cDNA and reporter constructs will be added as they are developed and/or acquired from other sources, and verified.