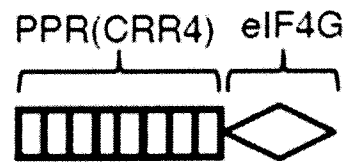
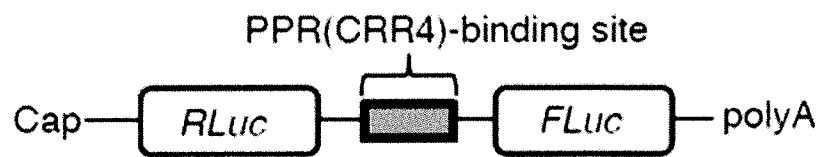


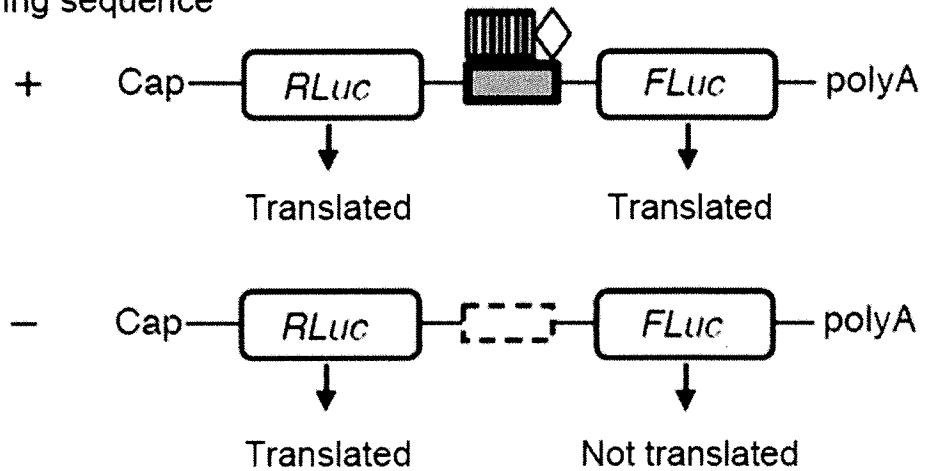
[Figure 1]

A Effector plasmid

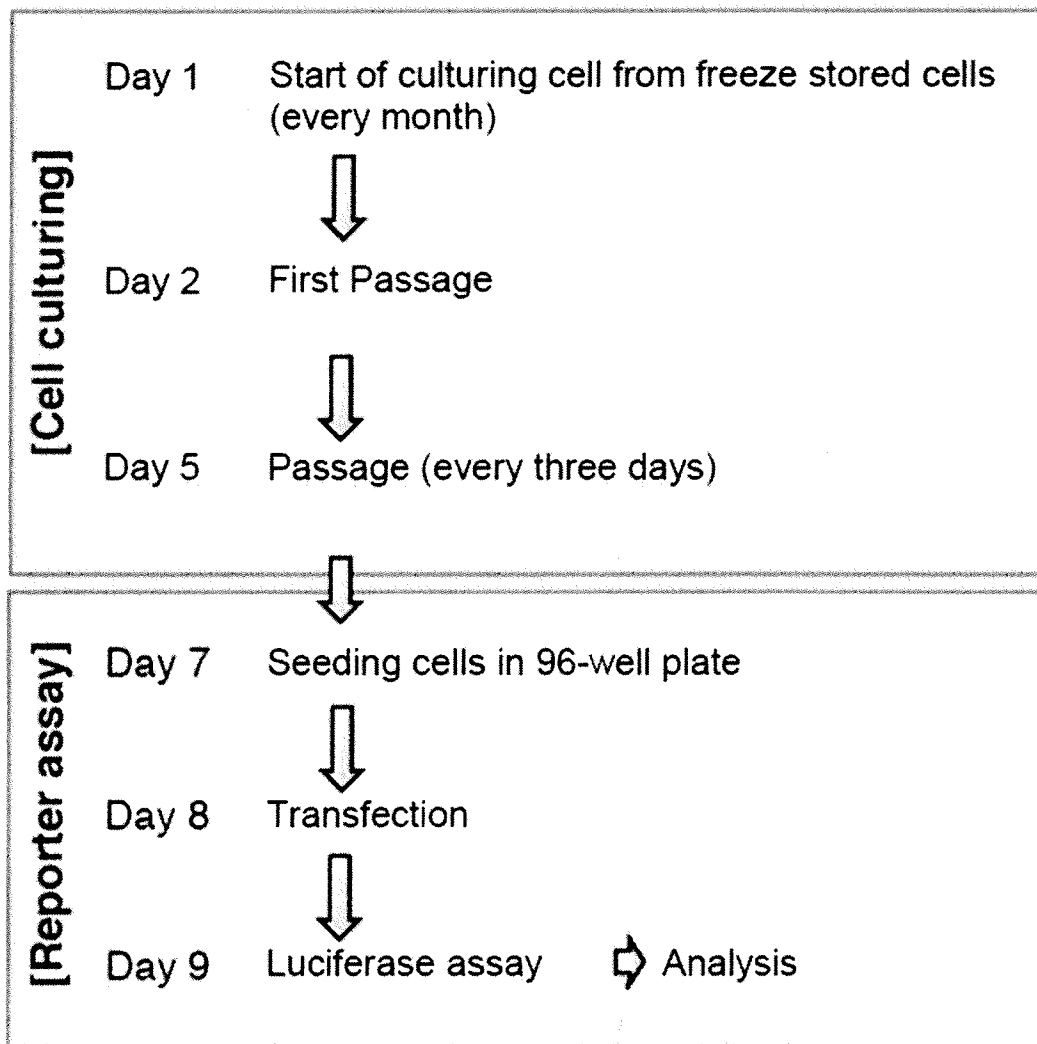
Reporter plasmid

**B**

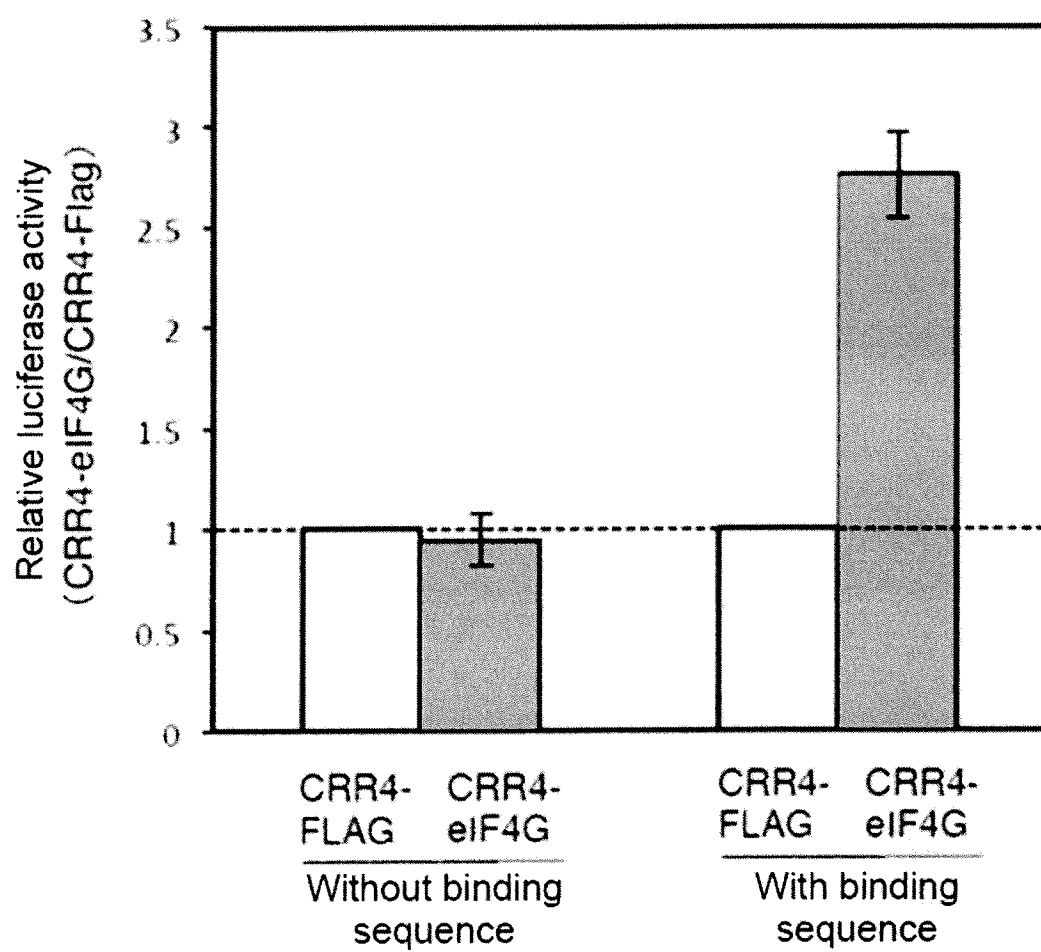
Binding sequence



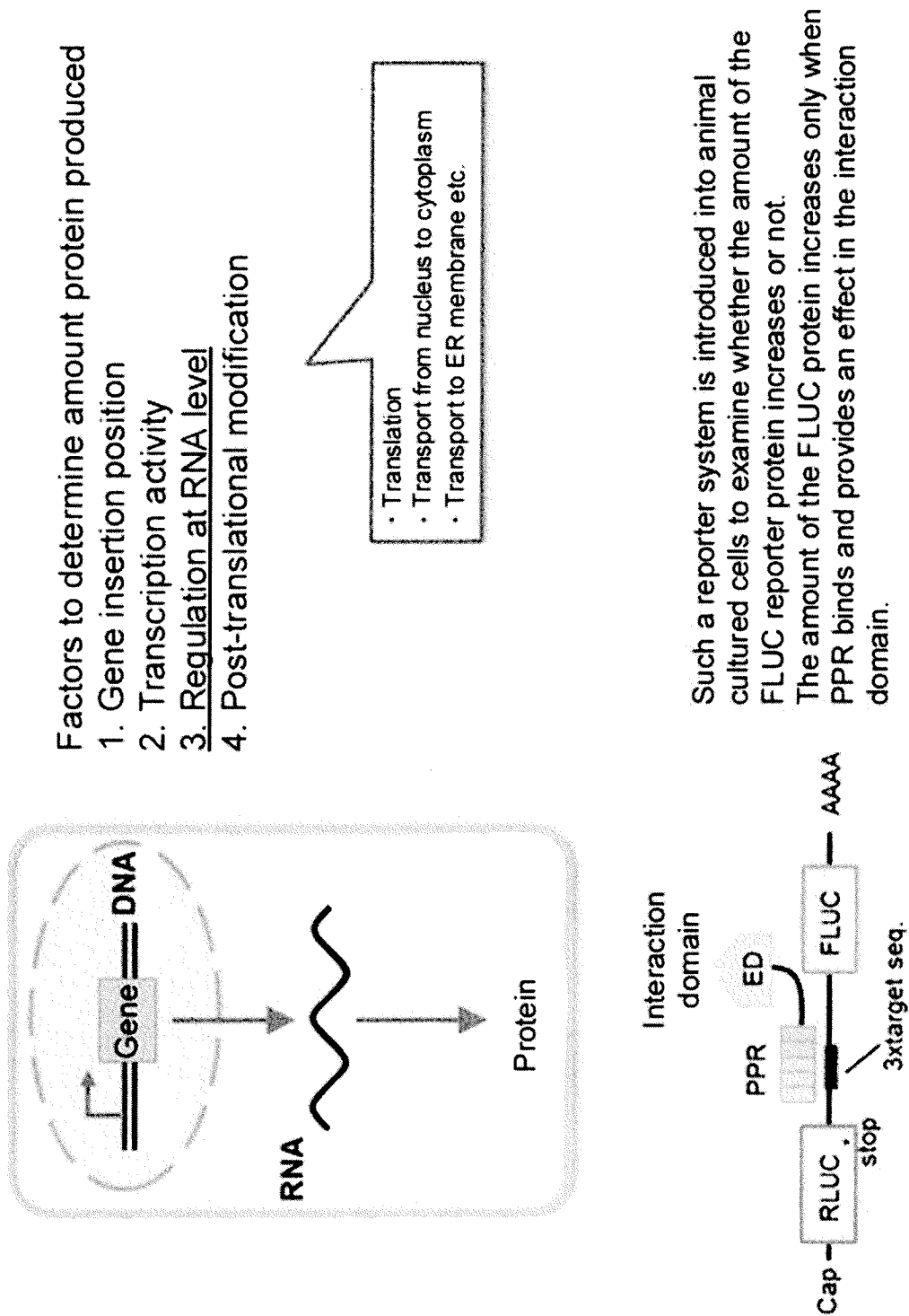
[Figure 2]



[Figure 3]

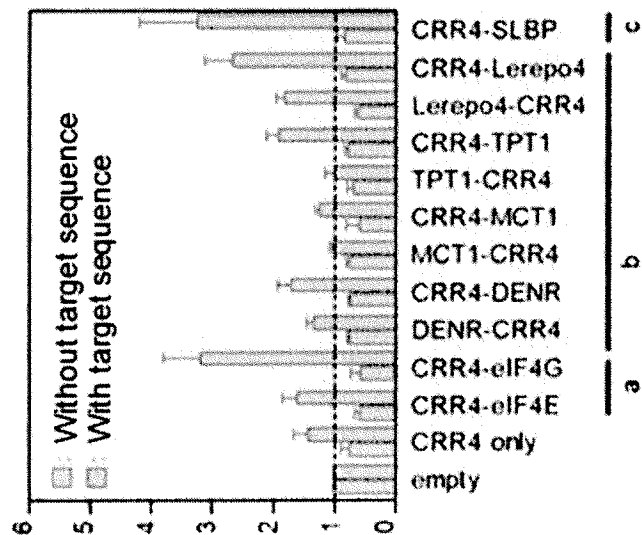


[Figure 4]



[Figure 5]

1. Activation of translation by ribosome recruiting

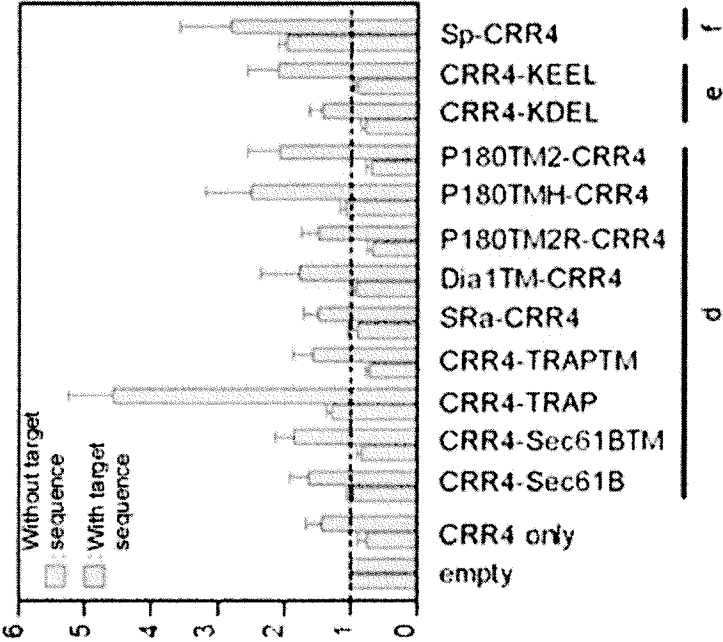


Effector domain	Function
1. Ribosome binding	
a. Translation-initiation-related factor	
eIF4E	Cap binding protein
eIF4G	eIF4 scaffold
b. Ribosome-binding protein	
DENR	Density regulated protein
MCT-1	Malignant T-cell amplified sequence 1, RNA binding (PUA domain)
TPT1	Translationally-controlled tumor protein
Lerepo4	Zinc finger CCHC domain, putative polysome binding
2. Transport activity	
SLBP	Related with stem-loop binding protein, translation factor of Histone, increase in export efficiency, etc.

- a. Translation initiation factor
- b. Ribosome-binding protein
- c. Nucleus-cytoplasm transport

[Figure 6]

2. Activation of translation by ER tethering



Effector domain	Function
3. ER binding	
a. Anchor of ER membrane	Subunit of composite for inserting protein into ER membrane
SEC18B	Subunit of composite for inserting protein into ER membrane
TRAP-α	Subunit of composite for inserting protein into ER membrane
SRα	Subunit of composite for inserting protein into ER membrane
Dia1	Cytochrome b5 reductase 3
P180	Functions to pass mRNA to ribosome on ER?
b. ER retention signal	
KDEL/KEEL	
c. Signal peptide	
MONSIEUR/VIAT/GNIS	Added to N-terminal, recognized by SRP, and localized on ER

- d. ER anchor translation initiation factor
- e. ER retention
- f. ER localized