$\beta \text{-}galactosidase \ assay \ (\text{to determine transfection efficiency})$

Transfect pCMV-β-gal to cells

Incubate cells more than 24hr

Wash cells with 1xPBS twice, RT

Fix cells with 1% Formaldehyde in PBS for 10min, RT

Wash cells with 1xPBS twice, RT

Add Staining solution to cells

Incubate cells at 37°C, O/N

1% Formaldehyde

37% Formaldehyde	1ml	0.3ml	0.1ml
1 x PBS	36ml	10.8ml	3.6ml
total	37ml	11.1ml	3.7ml

Staining Solution

	For 1ml	For 2ml	For 5ml	Final conc.
1xPBS	908ul	1816ul	4540ul	~1x
0.2M K-ferricyanide	20ul	40ul	100ul	4mM
0.2M K-ferrocyanide	20ul	40ul	100ul	4mM
1M MgCl2	2ul	4ul	10ul	2mM
20mg/ml X-gal	50ul	100ul	250ul	1mg/ml