# Immunohistochemistry Protocol for Whole-Mount or Vibratome-Sectioned Tissue PECAM Antibody Staining

For use with mouse tissue (whole-mount or vibratome-sectioned), fixed with PFA (2-4%)

- 1. Block with 0.3% Triton/1X PBS containing 5% Normal Donkey Serum.
  - 2 hours
  - Room temp
- 2. Incubate with rat anti-mouse CD31 antibody at 1:500 dilution in blocking buffer.
  - 12-15 hours (O/N)
  - 4° C
- 3. Wash with 1x PBS/0.05% Tween
  - 1 hour
  - room temp
- 4. Incubate with donkey anti rat fluorescence conjugated antibody diluted 1:200 in blocking buffer.
  - 3-4 hours
  - 4° C
- 5. Wash with 1x PBS/0.05% Tween
  - 2 hours-overnight
  - 4° C

# Protocol for LacZ Staining (mouse V26)

Stock: .5M EGTA pH 8.0

1M Tris pH 7.3 1M MgCl

2mM MgCl in 1xPBS

1% DOC 2% NP40

Xgal 25mg/ml DMF

#### Glut Fix

1xPBS/0.2% gluteraldehyde/5mM EGTA pH8/2mM MgCl (pH7.3)

500ml: 50 ml 10xPBS 100ml: 10 ml

4 ml 25% glut 0.8 ml 5 ml 0.5M EGTA 1 ml 1 ml 1M MgCl 0.2 ml

### Detergent Rinse:

1xPBS/2mM MgCl/ 0.01% sodium deoxycholate DOC/ 0.02% NP-40 (pH7.3)

100ml: 10ml 10xPBS

0.2 ml1M MgCl 1 ml 1% DOC 1 ml 2% NP40

## Staining Solution (50ml):

1XPBS/2mM MgCl/0.01% DOC/0.02% NP40/ 5mM Kferricyanate (III)/5mM Kferrocyanide (II)/Xgal 1mg/ml /20mM Tris pH 7.3

Add to rinse solution (per 50ml stain)

Kferrocyanide (II): 0.106gm Kferricyanate (III): 0.0823gm

Tris 1M ph 7.3: 1ml

## Add Xgal per amount used:

X-gal 25mg/ml stock in DMF

#### Protocol:

Fix embryos in Glut fix (E8-9: 10min; E10-12: 20min)

Detergent rinse 3x 30min

### Stain:

Add staining solution at 37° C, cover in foil (keep dark) 4hrs-o/n

Wash: 1XPBS- 5min

Fix: 4% PFA 2+hours

<u>4%PFA</u>

20gm PFA (with mask) 450ml ddH2O heat H2O to 50°C Add 15 drops NaOH from plastic pipet Soln clears as reaches 60° C Cool on ice Add 10ml 10x PBS