

**Supplementary data legend:**

**Video 1: Representative laminar shear flow experiment with G2 cells perfused on VCAM-1/SDF-1 coated plate. Magnification x20.**

**Video 2: Representative laminar shear flow experiment with G2 cells pre-treated with PKC- $\zeta$  PS peptides (10  $\mu$ M, one hour) perfused on VCAM-1/SDF-1 coated plate. Magnification x20.**

**Video 3: Representative laminar shear flow experiment with G2 cells perfused on VCAM-1/SDF-1 coated plate. Magnification x10.**

**Video 4: Representative laminar shear flow experiment with B1 cells perfused on VCAM-1/SDF-1 coated plate. Magnification x10.**