



**Figure S3. Stress-strain behavior of Phenylboronate containing copolymer (PBCC)-poly(vinylalcohol) (PVA) cryogels.** Figs. S3a-c show the stress-strain behavior of NVP, AVP and AADP cryogels, respectively, under uniaxial compression with 100 kN load cell under displacement control at the rate of 1 mm/min. The modulus of elasticity ( $\lambda$ ) for each cryogel sample is calculated from the elastic deformation portion of the respective stress-strain graph. PBCC-PVA cryogels have showed superior mechanical strength compared to conventional poly(*N*-isopropylacrylamide) and poly(acrylamide) cryogels due to the presence of PVA. The superior mechanical properties of AVP ( $\lambda = 7.195$  MPa) and AADP ( $\lambda = 3.895$  MPa) cryogels compared to that of NVP ( $\lambda = 2.172$  MPa) cryogels can be attributed to the presence of acrylamide as copolymer backbone. The elastic moduli of AVP and AADP cryogels suggest that 4-vinylphenylboronic acid-polyol interactions are relatively stronger than *N*-acryloyl-3-aminophenylboronic acid-polyol interactions.