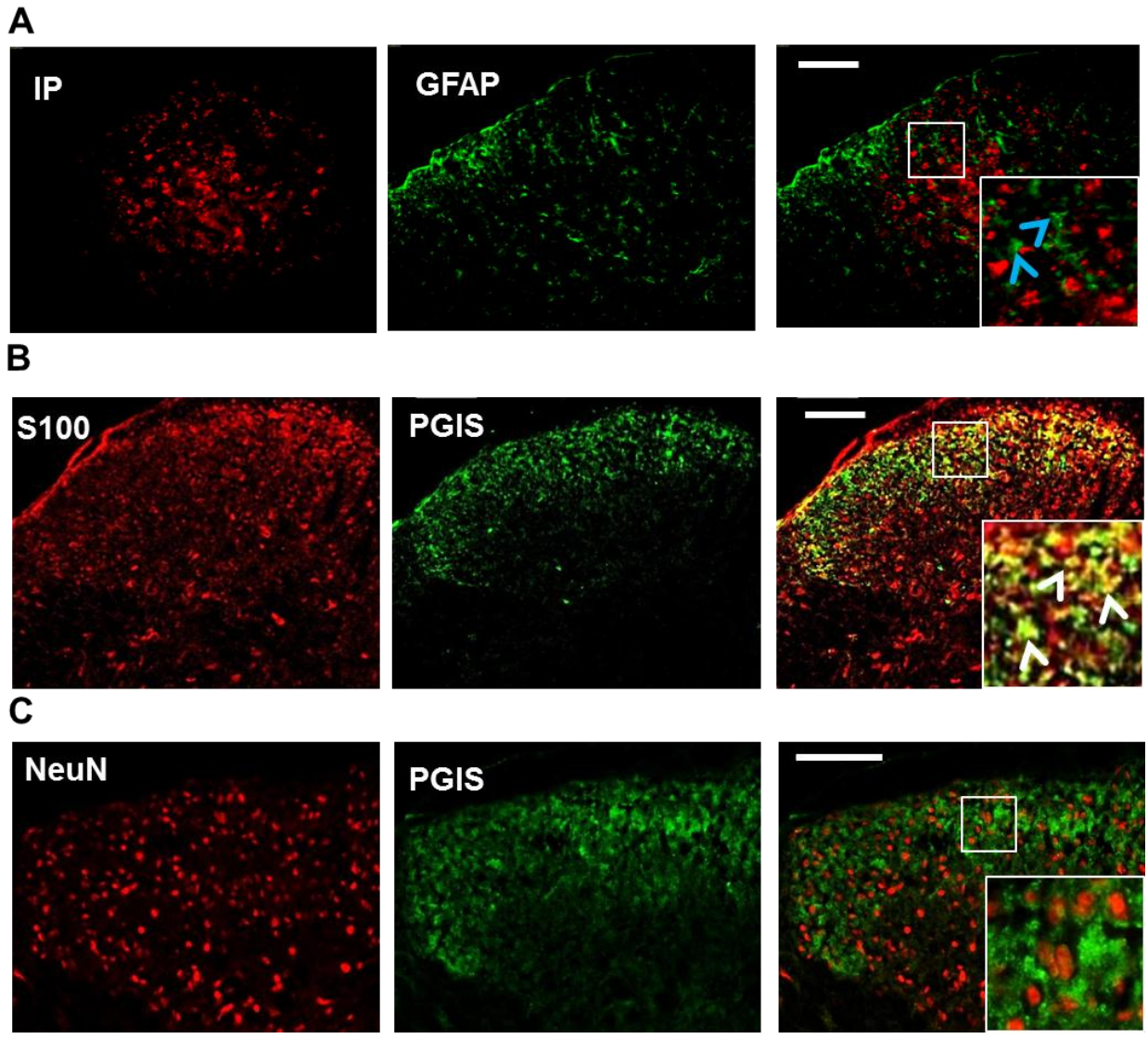
Supplemental Digital content 1

Figure 1:

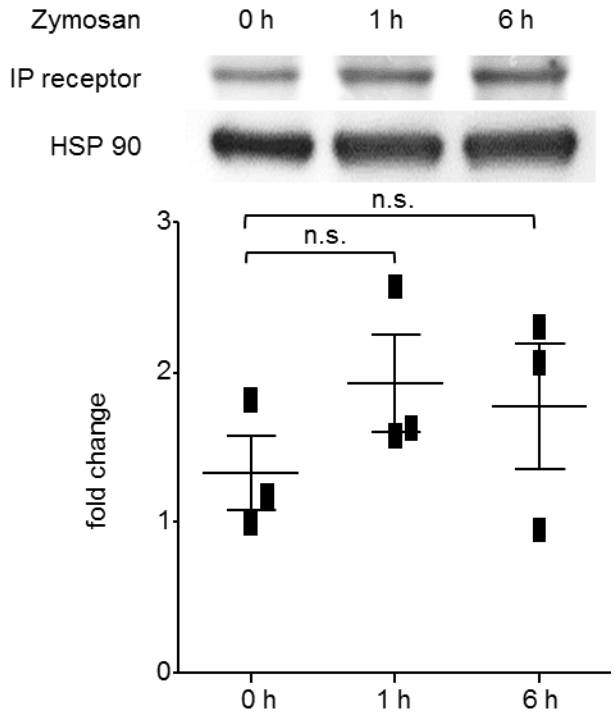


Prostacyclin synthase is expressed in lumbar dorsal horn glial cells

A No colocalization of IP and the astrocyte marker glial fibrillary acidic protein (GFAP, blue arrowheads) is observed. *B* Immunhistochemical staining show the prostacyclin synthase (PGIS) colocalized with the glia marker S100 in the layers of the lumbar dorsal horn (white arrowheads).

C No colocalization of PGIS and the neuronal marker NeuN is observed. The scale bar represents 100 μm. The insets are magnifications of the areas shown as white boxes.

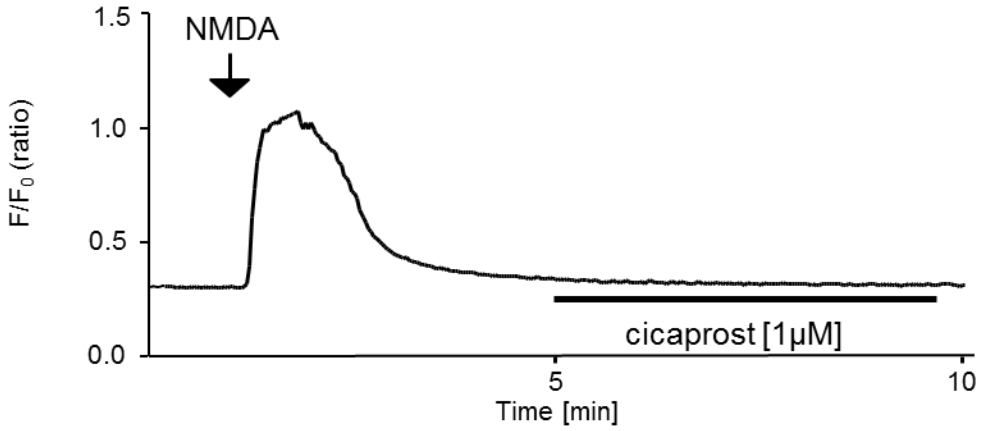
Figure 2:



Zymosan-induced peripheral inflammation does not affect the IP receptor expression in the spinal cord

Ipsilateral dorsal horn of the spinal cord segments L4-5 were dissected at the indicated time points after intraplantar injection of 20 µl Zymosan (10 mg/ml). Western Blot analysis did not show differences in the IP receptor expression after peripheral inflammation. Data shown as mean ± SEM (n=3). Two-tailed Student´s *t*-test.

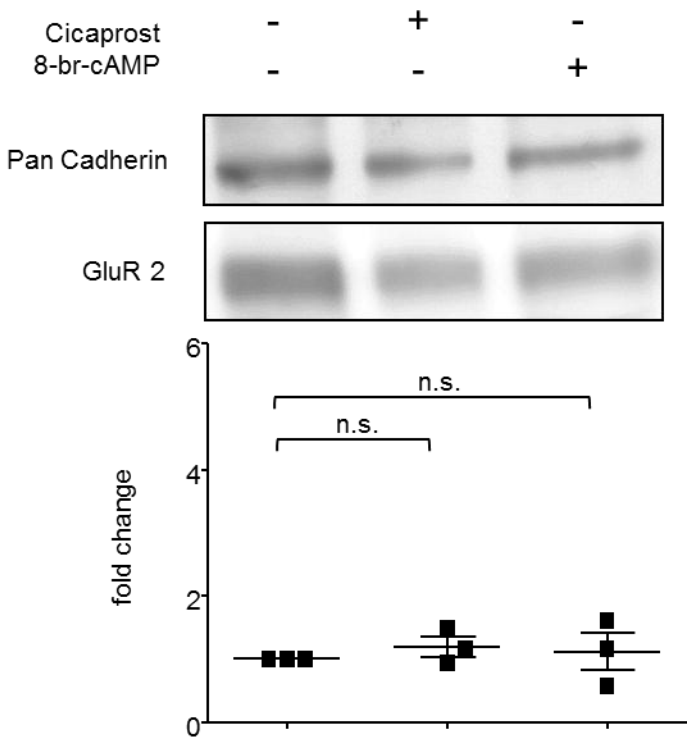
Figure 3:



Cicaprost does not induce intracellular calcium concentrations in neurons.

A representative trace for calcium imaging of cultured primary spinal cord cells. Cells were loaded with Fura-2-AM and stimulated with 100 µM N-methyl-D-aspartate (NMDA) to identify neurons. Afterwards they were incubated with 1 µM Cicaprost. In no cell a increase of the intracellular calcium concentration was detected.

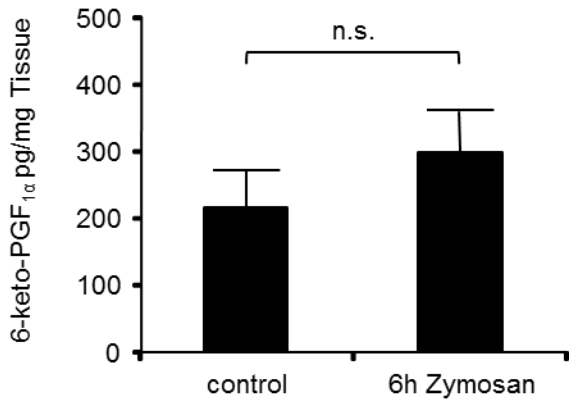
Figure 4:



Prostacyclin does not affect the amount of GluR2 in the membrane

Western Blot analysis of stimulated embryonic spinal cord neurones stimulated with Cicaprost (1 µM) or 8-bromo cAMP (20 µM) showed no difference in the GluR2 amount in the membrane. Data shown as mean ± SEM (n=3). Two-tailed Student´s *t*-test.

Figure 5:



Prostacyclin does increase in DRGs after intraplantar zymosan injection

Following intraplantar injection of 20 µl zymosan (10 mg/ml) the ipsilateral L4-L6 dorsal root ganglia were dissected at the indicated times and prostanoid levels were determined by Liquid chromatography-tandem mass spectrometry . Data are shown as mean ± SEM (control n=6, 6h Zymosan n=7). Two-tailed Student´s *t*-test.