Treatment of EBs with VEGF-A, cGMP and MMQ during hyperoxic exposure did not rescue the expression of vascular genes, cyclases and phosphodiesterases. EBs were exposed to normoxia or hyperoxia between d2 and d5. At the end of the exposure, total RNA was extracted and analyzed by RT-real time-PCR. Addition of VEGF-A (40ng/ml), cGMP (100µm) and MMQ (0.6µm) during oxygen exposure did not significantly prevent the decreased expression of Pecam-1, Vegfr-2, sGC and Pde4 genes induced by high oxygen. Experiments were performed three times. A representative experiment is shown.