

GPR37 Modulates Progenitor Cell Dynamics Following Stroke

DR. SHARON AMADI OWINO

SMITH COLLEGE, MASSACHUSETTS, USA

The generation of neural stem and progenitor cells following injury is critical for the function of the central nervous system, but the molecular mechanisms modulating this response remain largely unknown. We have previously identified the G protein-coupled receptor 37 (GPR37) as a modulator of ischemic damage in a mouse model of stroke. Herein we further demonstrate that GPR37 functions as a critical negative regulator of progenitor cell dynamics and gliosis following ischemic injury. This work highlights that GPR37 regulates the response of progenitor cells to ischemic injury and provides new perspectives into the potential for manipulating endogenous progenitor cells following stroke.