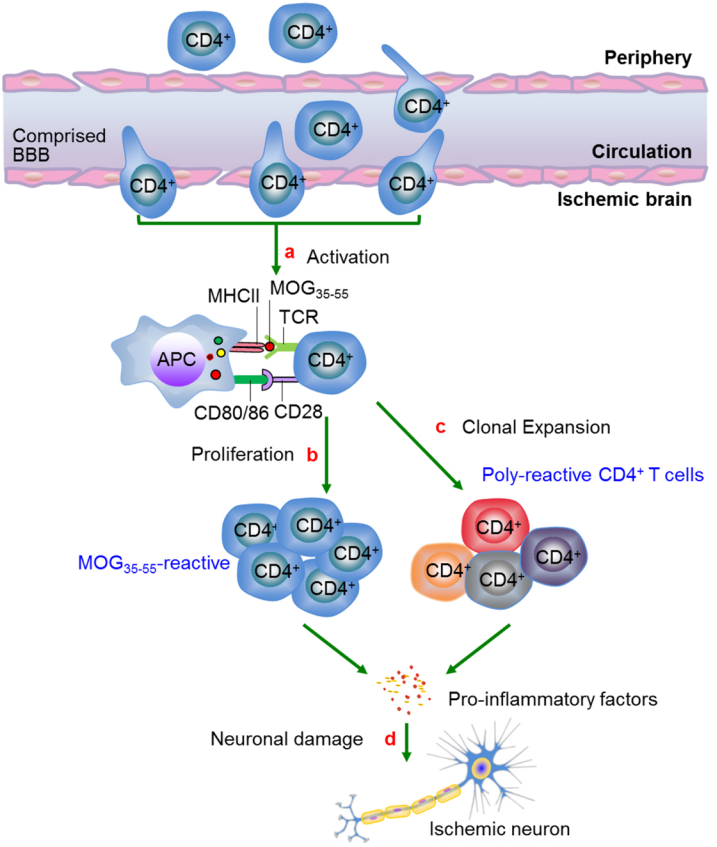

Upon brain ischemia, MOG_{35-55}-reactive $CD4^+$ T cells enter the circulation and extravagate into the brain. Neuroantigens released after brain ischemia are phagocytosed, processed and presented by APCs including brain-resident microglia to MOG_{35-55}-reactive $CD4^+$ T cells. Thereby, the MOG_{35-55}-reactive $CD4^+$ T cells are activated by APCs (**a**), and then undergo *in situ* proliferation (**b**), or clonal expansion (**c**). These newly emerged T cell clones together with MOG_{35-55}-reactive T cells can be activated by APCs and produce pro-inflammatory factors that aggravate BBB disruption, inflammation and neuronal damage (**d**). a: Activation; b: Proliferation; c: Clonal expansion; d: neuronal damage.