P65 Wogonin, a flavone from Scutellaria radix, inhibits nitric oxide production from RAW 264.7 cells

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Nitric oxide is involved in various physiological processes. Among isoforms of nitric oxide synthase, iNOS is partly responsible for inflammation and septic shock. During our continual search for anti-inflammatory flavonoids, we have found that flavonoids, especially flavones, possessed the inihibitory activity of NO production by iNOS from LPS-activated RAW 264.7 cell. In this study, flavonoids from Scutellaria radix were investigated for their inhibitory activity of nitric oxide production. It was found that wogonin, among tested flavonoids including baicalein, oroxylin A, skullcapflavone II, showed the strongest inhibition of nitric oxide production (IC₅₀ = 17 uM). And this inhibition was, at least partly, due to down-regulation of iNOS enzyme induction, not due to direct inhibition of iNOS enzyme activity.