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***In Vitro* Biological Activity of Prenylflavanones**

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The biological Activity of ten prenylflavanones purified from *Sophora tomentosa* L., and *Sophora moorcroftiana* Benth. ex Baker (Leguminosae) was investigated. The flavanones with prenyl-, lavandulyl- or geranyl groups on A ring, and two bioactive flavonostilbenes on ring B and stilbene resveratorol) showed tumor-specific cytotoxic activity. Antimicrobial activity, and anti-HIV activity, radical generation, and O₂⁻ scavenging activity. There was a positive relationship between radical generation and O₂⁻ scavenging activity in these prenylflavanones. These data suggest the medicinal significance of prenylflavanones.