Ocimum sanctum Extract

General description:
- Botanical Name: Ocimum sanctum L.
- Family: Lamiaceae
- Common Name: Holy basil, Tulsi
- Part used: Leaves

Holy basil is being used for its important role in the traditional Ayurvedic and Unani system of holistic health and herbal medicine from ancient time. It is an erect soft aromatic herb. Holy basil is considered to be an adaptogen, balancing different processes in the body, and helpful for adapting to stress. In Ayurveda, it referred as a kind of 'elixir of life' and believed to promote longevity.[1]

Phytochemistry
The volatile oil of O. sanctum leaves contains urosolic acid, eugenol, carvacrol, linalool, limatrol and caryophyllene.[1] The aqueous extract of O. sanctum leaves revealed alkaloids, flavonoids, tannins and carbohydrates.[2]

Pharmacological activities:
Scientific studies on O. sanctum have shown it’s potent antiinflammatory, analgesic, antipyretic, antidiabetic, hepatoprotective, hypolipidemic, antistress and immunomodulatory activities.[3] Hydroalcoholic extract of O. Sanctum restored superoxide dismutase and catalase activity.
Clinical Study:

➢ Effect of *O. sanctum* crude extract was studied to evaluate its impact on life span, thermotolerance and reactive oxygen species (ROS) scavenging activities in *C. elegans*. The results revealed that extract significantly extended the life span of *Caenorhabditis elegans*. The extract also proved to be a strong free radical scavenger and increased resistance against thermal stress.\(^4\)

➢ A preclinical study report indicated that *O. sanctum* possess significant anti-stress activity.\(^5\)

➢ In 2014, a triple blind randomized control trial was conducted in India. Results indicated that *O. sanctum* mouth rinse was proved to be an effective mouthwash owing to its ability in decreasing periodontal indices by reducing plaque accumulation, gingival inflammation and bleeding. No side effect has been observed.\(^6\)

➢ A double-blind randomized controlled cross-over trial was conducted to evaluate the immunomodulatory potential of Tulsi on volunteers. 300 mg capsules of ethanolic leave extracts of leaves of Tulsi or placebo were administered to 24 healthy volunteers on empty stomach. Results clearly ascertain the immunomodulatory role of Tulsi leaves extract.\(^7\)

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Botanical/ Scientific name</th>
<th><em>Ocimum sanctum</em></th>
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<tr>
<td>CAS No.</td>
<td></td>
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<tr>
<td>Description</td>
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<tr>
<td>Identification</td>
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<td>Microbiological profile</td>
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References: