

DHH-B

Mood Support*



Dihydrohonokiol-B (DHH-B) is a natural compound derived from the root bark of *Magnolia officinalis*, a traditional Chinese medicinal plant. It has garnered considerable attention in recent years due to its potential therapeutic properties, having 20x the strength of standard magnolia extract. DHH-B promotes a sense of tranquility and calmness. By targeting key neurotransmitters, this remarkable compound helps alleviate stress and supports relaxation. Its unique mechanism of action encourages a balanced state of mind, allowing you to navigate daily challenges with ease. Additionally, DHH-B promotes healthy sleep patterns, allowing individuals who take it to achieve restful nights and wake up feeling refreshed and rejuvenated.



DEMOGRAPHIC & CLINICAL APPLICATIONS

MEN & WOMEN	PATIENTS REQUIRING
	<ul style="list-style-type: none"> • Stress & Sleep Protocols • Mood & Neurological Protocols • Inflammation Support



DIRECTIONS: Take 1 capsule as needed or as directed by your healthcare practitioner. **SHOULD NOT BE TAKEN WITH ALCOHOL**

BENEFITS



Promotes an Overall Sense of Calm



Helps Promote Relaxation & Reduced Nervousness



Maintains Healthy Neurotransmitter Release (Specifically, GABA)



Promotes Both Healthy REM & Non-REM Sleep Cycles

DHH-B

SUPPLEMENT FACTS

Serving Size: 1 Capsule | Servings Per Container: 30

	Amount Per Serving	%DV
DHH-B (<i>Dihydrohonokiol-B</i>) (derived from magnolia bark)	7.5 mg	*

* Daily Value Not Established

Other Ingredients: Cellulose, Rice Powder, Hydroxypropyl Methylcellulose, Magnesium Stearate, Silicon Dioxide, Vegetable Capsule (Hypromellose, Titanium Dioxide)

DHH-B MAX

SUPPLEMENT FACTS

Serving Size: 1 Capsule | Servings Per Container: 30

	Amount Per Serving	%DV
DHH-B (<i>Dihydrohonokiol-B</i>) (derived from magnolia bark)	15 mg	*

* Daily Value Not Established

Other Ingredients: Cellulose, Rice Powder, Hydroxypropyl Methylcellulose, Magnesium Stearate, Silicon Dioxide, Vegetable Capsule (Hypromellose, Titanium Dioxide)



IMPACT ON GABA AND OTHER NEUROTRANSMITTERS

DHH-B exerts its biological effects through multiple mechanisms, contributing to its diverse pharmacological activities. One of its primary mechanisms of action is through GABAergic modulation. It acts as a positive allosteric modulator of gamma-aminobutyric acid (GABA) receptors, enhancing GABAergic neurotransmission.

In addition to its GABAergic effects, DHH-B also influences the release and reuptake of various other neurotransmitters, including dopamine, serotonin, and norepinephrine. By promoting levels of these neurotransmitters, DHH-B exhibits potential support for mood, relaxation, and cognitive function.

ANTIOXIDANT AND INFLAMMATION SUPPORT

Another important aspect of DHH-B is its ability to support the production of pro-inflammatory cytokines such as tumor necrosis factor-alpha (TNF- α) and interleukins (IL-1 β , IL-6).

Furthermore, DHH-B displays robust antioxidant properties. It is a scavenger of reactive oxygen species (ROS) and upregulates endogenous antioxidant enzymes. These antioxidant effects contribute to its neuroprotective and anti-aging properties. DHH-B's antioxidant and neuroprotective properties make it a candidate for supporting neurologic physiology and functionality to promote both short term and long term brain health.

The compound's potential to provide inflammatory support suggests its possible application use in helping to maintain healthy joints and well functioning digestive and immune systems.

REFERENCES

1. Lin Y, Li Y, Zeng Y, Tian B, Qu X, Yuan Q, Song Y. Pharmacology, Toxicity, Bioavailability, and Formulation of Magnolol: An Update. *Front Pharmacol.* 2021 Mar 17;12:632767. doi: 10.3389/fphar.2021.632767. PMID: 33815113; PMCID: PMC8010308.
2. Shen JL, Man KM, Huang PH, Chen WC, Chen DC, Cheng YW, Liu PL, Chou MC, Chen YH. Honokiol and magnolol as multifunctional antioxidative molecules for dermatologic disorders. *Molecules.* 2010 Sep 16;15(9):6452-65. doi: 10.3390/molecules15096452. PMID: 20877235; PMCID: PMC6257695.
3. Hou Y, Aboukhatwa MA, Lei DL, Manaye K, Khan I, Luo Y. Anti-depressant natural flavonols modulate BDNF and beta amyloid in neurons and hippocampus of double TgAD mice. *Neuropharmacology.* 2010 May;58(6):911-20. doi: 10.1016/j.neuropharm.2009.11.002. Epub 2009 Nov 14. PMID: 19917299; PMCID: PMC2838959.
4. Woo SM, Seo SU, Kubatka P, Min KJ, Kwon TK. Honokiol Enhances TRAIL-Mediated Apoptosis through STAMBPL1-Induced Survivin and c-FLIP Degradation. *Biomolecules.* 2019 Dec 6;9(12):838. doi: 10.3390/biom9120838. PMID: 31817770; PMCID: PMC6995549.
5. Arora S, Singh S, Piazza GA, Contreras CM, Panyam J, Singh AP. Honokiol: a novel natural agent for cancer prevention and therapy. *Curr Mol Med.* 2012 Dec;12(10):1244-52. doi: 10.2174/156652412803833508. PMID: 22834827; PMCID: PMC3663139.