

Taxifolin BC-DHQ[®]

Nature's Powerful Antioxidant



Taxifolin, Dihydroquercetin (DHQ)

Known as one of nature's most powerful antioxidants, taxifolin is a flavonoid found in a variety of foods, including apples and onions, as well as milk thistle and larch trees.

Emerging research suggests taxifolin may support immune, respiratory, skin and cellular health benefits. Taxifolin's powerful antioxidant properties also make it a perfect natural alternative to synthetic chemicals for food preservation.

Advantages of Taxifolin BC-DHQ[®]

- US FDA no objection to notification of self-affirmed GRAS (GRN No. 916)
- Sustainably produced using a proprietary bioconversion manufacturing process
- Non-GMO, vegan, and kosher
- Clean, reliable, and scalable production methods
- Available at 10% active

Reliable Supply Chain

Taxifolin BC-DHQ[®] is a sustainable source of highly pure taxifolin without reliance on intensive farming or inconsistent botanical extraction.

Benefit Areas



- Antioxidant Support
- Cellular Health



- Immune Health
- Respiratory Health



- Skin Health



- Food Preservation

Evidence

- Taxifolin has a greater antioxidant capacity than vitamin C¹
- Taxifolin may neutralize free radicals² and prevent oxidative cellular damage³

- Emerging evidence suggest that taxifolin may have immunomodulatory activity,^{4,5} supporting its role in a healthy immune response⁶
- A study in 112 subjects showed taxifolin as an adjuvant supported respiratory function.⁷

- In human skin cells, taxifolin performed better than retinoic acid in down-regulating MMP-1,⁸ an enzyme responsible for collagen degradation associated with sun exposure
- Emerging evidence suggests oral taxifolin supplementation may support a healthy inflammatory response related to skin conditions^{9,10}

- Taxifolin inhibited lipid peroxidation and possessed antioxidant activity similar to Trolox, α -tocopherol, BHT, and BHA^{2,11}
- Superficial treatment of 0.2% or 0.5% taxifolin improved quality and shelf life of packaged meat¹² and salmon,¹³ respectively

*These statements have not been evaluated by the Food and Drug Administration. This ingredient is not intended to diagnose, treat, cure or prevent any disease.

About Us

Blue California is an entrepreneurial, science-based solutions provider and manufacturer of clean, natural, and sustainable ingredients used in food, beverage, flavor, fragrance, dietary supplements, personal care and cosmetic products. For more than 25 years, Blue California has built a strong reputation for creating value in these diverse natural product and nature-inspired industries. We are one of the few vertically integrated companies in our focus industries.

Capabilities Include

- End-to-End Concept Development
- Encapsulation and Delivery Technologies
- Ideation and Consumer Insights
- Clinical Trials

Learn more at www.bluecal-ingredients.com



Immune health will remain a top priority for consumers, with 64% of global consumers looking to improve their immunity over the next 12 months.¹⁴

Scientific Studies

Antioxidant Activity

A study was conducted to evaluate the antioxidant and antiradical activities of taxifolin using different *in vitro* bioanalytical methods.²

Design:

- Pure taxifolin was compared with other standard antioxidants including BHA, BHT, α -tocopherol, and Trolox

Outcomes:

- Taxifolin demonstrated 81% inhibition of linoleic acid peroxidation at 30 μ g/ml, which is similar to inhibition by other antioxidants
- Taxifolin also exhibited effective DMPD^{•+}, ABTS^{•+}, O₂^{•-} and DPPH[•] scavenging effects, reducing capabilities, and Fe²⁺ chelating effects

Respiratory Health

A clinical study investigated the effect of oral taxifolin supplement as an adjuvant in men who suffered from acute compromised respiratory function.⁷

Design:

- 112 subjects were divided into 3 groups: group 1 (n=50) received standard therapy, group 2 (n=32) received standard therapy plus α -tocopherol acetate and sodium thiosulphate, group 3 (n=30) received the standard therapy plus 40-60 mg of taxifolin four times a day

Outcomes:

- Compared to controls, the group that received taxifolin supplementation showed a more rapid respiratory immune response, a tendency towards improved indicators of respiratory function, and increased levels of endogenous antioxidants

References:

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