RINATI LABS

Amlasome™

Potent Amla Stem Cell Extract Enriched in Brightening Phytoactives & Antioxidants

INCI
Phyllanthus Emblica Extract

- Mild scent
- Plant based
- Water soluble

1-5%
Usage level

- 100% natural
- Vegan
- Made in the USA
- cGMP-produced

Amlasome, a potent, eco-conscious **Indian gooseberry stem cell extract** that is naturally rich in brightening phytoactives, including vitamin C, that help improve the look of uneven skin tone, enhance radiance, and support skin's defense against environmental stressors*.

Traditional Ingredients: Vitamin C (ascorbic acid), Kojic acid, Niacinamide (Vitamin B3), Arbutin, Licorice Root Extract (Glabridin)

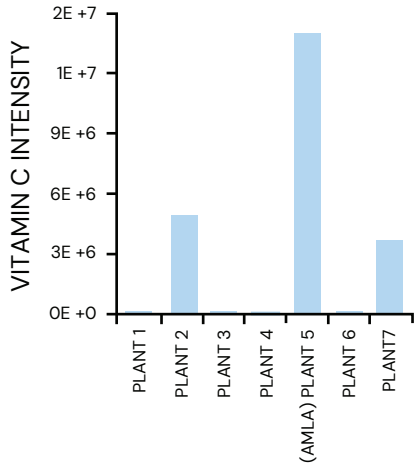
Typical Performance Profile: Traditional brightening ingredients typically target a single pigmentation pathway, most commonly through tyrosinase inhibition or antioxidant protection against oxidative stress associated with hyperpigmentation.

Amlasome Positioning: Amlasome delivers a metabolite-rich brightening and antioxidant system containing vitamin C derivatives, catechins, and procyanidins. Rather than focusing on a single enzyme pathway, Amlasome supports multiple biological processes associated with pigmentation balance, oxidative defense, and overall skin vitality.

Amlasome metabolites	Main Brightening Mechanism (based on scientific publication)
Ascorbic acid (Vitamin C)	Tyrosinase inhibition; antioxidant; reduces oxidized melanin to lighter form
Niacinamide	Inhibits melanosome transfer to keratinocytes
Epigallocatechin gallate	Tyrosinase inhibition; antioxidant; anti-inflammatory
Catechin	Tyrosinase inhibition; antioxidant; anti-inflammatory
Shikimic acid	Mild exfoliant (AHA-like activity); enhances desquamation of pigmented cells
Rosmarinic acid	Antioxidant; tyrosinase inhibition
Caffeic acid	Antioxidant; moderate tyrosinase inhibition
Trigonelline	Antioxidant; reduces UV-induced oxidative stress; tyrosinase inhibition
Isoleucine	Supports protein synthesis and skin repair; indirect effect
Succinic acid	Mild keratolytic/exfoliant; pH modulation, tyrosinase inhibition
Tryptophan	Precursor for melanin
Vanillic acid	Antioxidant; possible tyrosinase inhibition, inhibits melanogenesis
Quinate	Antioxidant; ROS scavenger, tyrosinase inhibition

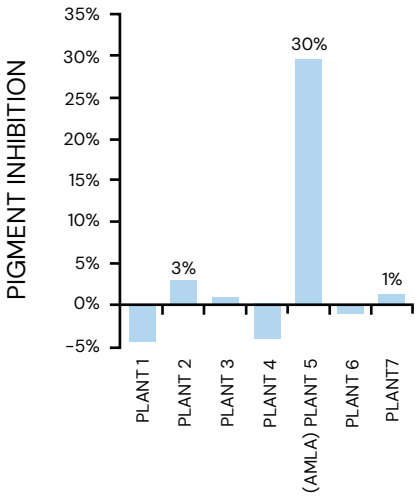
*Inspired by traditional Ayurvedic practices (a centuries-old system of herbal wellness used in India and Southeast Asia) and supported by in vitro testing. These statements have not been reviewed by the FDA. This product is not meant to diagnose, treat, cure, or prevent any disease.

VITAMIN C



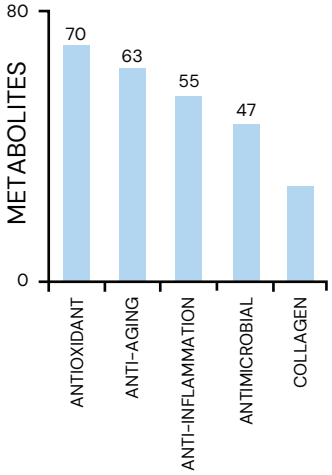
Amlasome is a plant extract naturally enriched in Vitamin C. Graphs shows the intensity level (LC-MS) of Vitamin C in Amla and other plant extracts.

PIGMENT INHIBITION



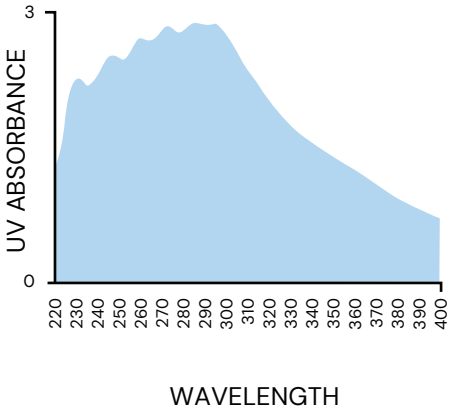
Amlasome inhibits melanin biosynthesis. Graph shows the suppression level of Tyrosinase (melanin formation enzyme) by **Amlasome** and other plant extracts.

BENEFICIAL METABOLITES



Amlasome contains numerous beneficial metabolites for skincare, such as **antioxidants, anti-aging, anti-inflammation, and antimicrobial compounds.**

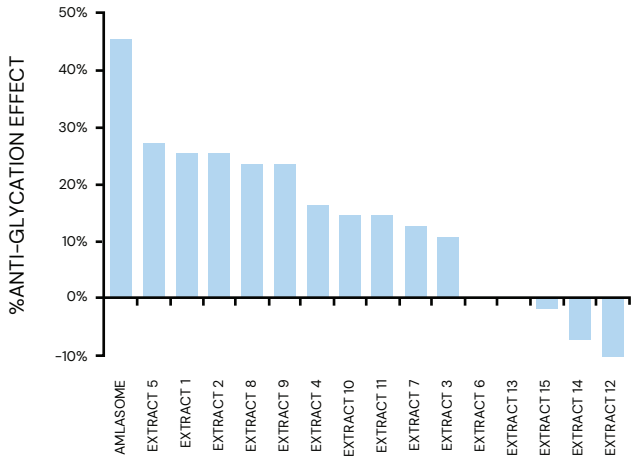
UV ABSORBANCE



Amlasome absorbs UV radiation, especially at the UV-B range, hence providing **UV-protection** to skin cells.*

*Inspired by traditional Ayurvedic practices (a centuries-old system of herbal wellness used in India and Southeast Asia) and supported by in vitro testing. These statements have not been reviewed by the FDA. This product is not meant to diagnose, treat, cure, or prevent any disease.

ANTI-GLYCATION ACTIVITY BY AMLASOME



Protein glycation is a harmful process that leads to the formation of advanced glycation end-products (AGEs), which accelerate aging and contribute to wrinkles, tissue stiffness, and chronic disease. The anti-glycation activity of plant calli was assessed by measuring inhibition of **human serum albumin** glycation. AGE formation was measured by fluorescence excitaion at 360/40nm and emission at 460/40nm. Activity was expressed as percent inhibition relative to glycated controls. Amlasome showed 45% anti-glycation activity of human serum albumin.