



THIOSPOT[®]

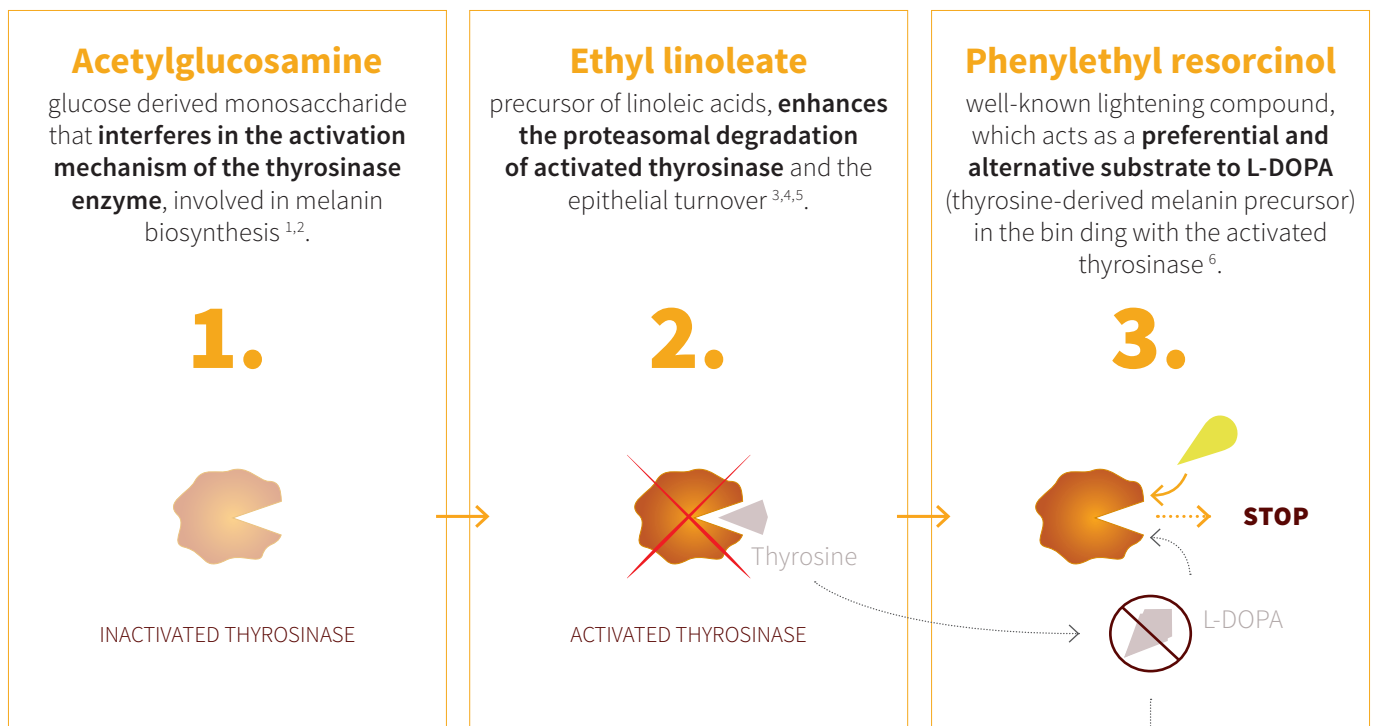


**SAFE AND DEPIGMENTING SOLUTIONS FOR
MELASMA & SKIN DARK SPOTS**

THIOSPOT®

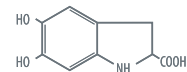
Multi-phase and synchronized depigmenting system focusing on the
MELANIN BIOSYNTHESIS PROCESS

ENZYMATIC PHASE

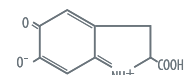


PRE-FORMED MELANIN
DEPOSITS ARE
REDUCED THROUGH
THE **STIMULATION OF
EPITHELIAL TURNOVER** ⁵

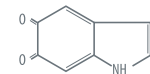
Leucodopachrome



Dopachrome



5,6-Indolquinone



Melanin

NON-ENZYMATIC PHASE

EVIDENT RESULTS

Evaluation of THIOSPOT® functional ingredients in the melanin biosynthesis process

Activity of tyrosinase⁷

-70%

Production of melanin⁸

-60%

Visibly effective

Pictures were taken before and after 60 days treatment, with two applications per day of THIOSPOT® Intensive⁹.



BEFORE



AFTER

Bibliography:

¹ Reduction in the appearance of facial hyperpigmentation after use of moisturizers with a combination of topical niacinamide and N-acetyl glucosamine: results of a randomized, double-blind, vehicle-controlled trial. Kimball AB, et al., - Br J Dermatol, 2010.

² Disruption of tyrosinase glycosylation by N-acetylglucosamine and its depigmenting effects in guinea pig skin and in human skin. Hwang JS, et al., - Journal of Dermatological Science 63, 2011.

³ Intracellular composition of fatty acid affects the processing and function of tyrosinase through the ubiquitin-proteasome pathway. Hideya Ando, et al. - Biochem. J., 2006.

⁴ Ethyl linoleate inhibits α-MSH-induced melanogenesis through Akt/GSK3β/β-catenin signal pathway. Gyeong-A Ko and Somi Kim Cho, - Korean J Physiol Pharmacol, 2018.

⁵ Keratinocyte Differentiation is Stimulated by Activators of the Nuclear Hormone Receptor PPARα. Karen Hanley, - The Society for Investigative Dermatology, Inc., 1998.

⁶ Mechanistic studies of the inactivation of tyrosinase by resorcinol. Michael R. L. Stratford, - Bioorganic & Medicinal Chemistry 21, 2013.

⁷ Data on File General Topics: Enrica Flori, et al., - San Gallicano Dermatologic Institute IFO IRCCS, Rome, Italy. In vitro evaluation on B16-F10 murine melanoma cells after 48h stimulation with α-MSH and treated with THIOSPOT® functional ingredients, 1 µl/ml each.

⁸ Data on File General Topics: Abich srl, 2012. In vitro evaluation on B16 melanoma cells treated with 1 µl/ml dilution of THIOSPOT® Intensive.

⁹ Data on File General Topics: Enrica Flori, et al., - San Gallicano Dermatologic Institute IFO IRCCS, Rome, Italy.

THIOSPOT®

COSMETIC SOLUTIONS



THIOSPOT® Ultra SPF 50+ 30 ml

Depigmenting cream with sun protection factor SPF 50+, dedicated to the attenuation and the prevention of skin hyperpigmentations during the day.

THIOSPOT® Intensive 30 ml

Depigmenting cream for face and décolletage, formulated for daily use to attenuate and prevent the skin hyperpigmentations.



THIOSPOT® SR Skin Roller 5 ml

Alcoholic lotion in a concentrated form, formulated for daily use to attenuate and prevent the isolated skin hyperpigmentations of major intensity.

Total safe lightening activity

Comparison between the cells viability with THIOSPOT® Intensive and a mix of 4% hydroquinone (HQ)\1⁸.

