

new

KÉRATENE® *alphactive* retard

reduction Factor



SYSTEMIC DHT DEPRESSOR

3oxo-5 α -steroid-4dehydrogenase
catalyst inhibitor

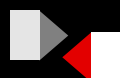
> benefits

- 1 fast catalyse inhibition with low bioaccumulation, free of 17-beta-estradiol disruptors
- 2 evident DHT reduction up to 4 times, comparable to synthetic -steride alternatives
- 3 ssbg/lutropin/fsh bio-chemically neutral formula, virtually no impact on libido

KÉRATENE is available in some countries under the commercial name KE234. For more details about how KÉRATENE helps against incipient alopecia and hair loss, consult your surgeon or trichologist doctor. KÉRATENE is not a permanent cure but a control and delay therapy against genetically-induced premature hair thinning based on hormonal factors. **FOR ADULT USE ONLY!** Personal results may vary. Consult your dermatologist doctor or a specialist trichologist to establish the correct dosage for your specific situation. KÉRATENE® *alphactive* Retard is not suitable for pregnant women, during pregnancy or during the lactation period. KÉRATENE® *alphactive* Retard is not compatible with any other therapy based on synthetic 5 α RD inhibitors or DHT suppressors from the -steride group. KÉRATENE® *alphactive* Retard is not compatible with Flutamide or Bicalutamide. The combination of these therapies should be avoided at all times. Because KÉRATENE® *alphactive* Retard reduces the level of DHT androgen in the body, it may affect the performance of professional athletes. Consult your team physician or endocrinologist for professional medical advice on the implications of low DHT and your athletic performance. KÉRATENE® *alphactive* Retard is not effective in cases of alopecia totalis, alopecia universalis and alopecia androgenetica NW 5, NW 6 as well as Ludwig 3 advanced, where total loss of hair density has already occurred or for patients with Parry Romberg syndrome. KÉRATENE® *alphactive* Retard is not effective in combination with anabolic-androgenic steroids or with chemotherapy. Read the instructions before use on www.keratene.com.



clinically tested in vivo



catalyse conversion



biosafe 350 - 750

ADRF 3.7x

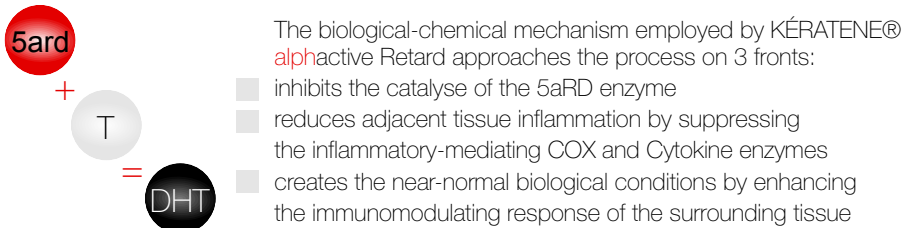
0% xenoestradiol / 0% estrogen

(SSBG) + (lutropin LT) + (FSH) + (T) neutral

what is kératene^{alph^{active}} retard

KÉRATENE® ^{alph^{active}} Retard is a systemic 3-oxo-5- α -steroid 4-dehydrogenase (5 α RD) catalyst enzyme inhibitor, formulated specifically to aid in the delaying of the effects of the androgen hormone Dihydrotestosterone (DHT) on the genetically-marked hair follicles. KÉRATENE® ^{alph^{active}} Retard provides a better control of the progressive thinning of hair caused by hormonal and genetic factors, and it is recommended for the maintenance of the existing hair density, in both pre- and postoperative cases. KÉRATENE® ^{alph^{active}} Retard is available in some countries under the commercial name of KE234® or Keratensynergist®.

how does kératene^{alph^{active}} work



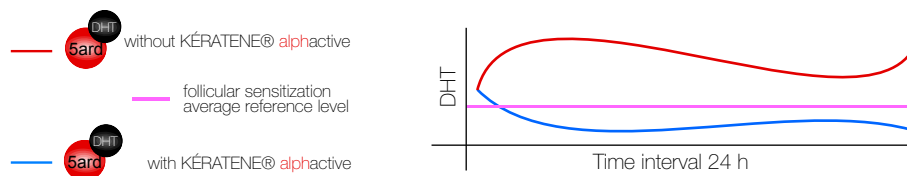
KÉRATENE® ^{alph^{active}} Retard depresses the total DHT level by suppressing the conversion of the androgen Testosterone (T) to DHT through the adhesion to the 5 α RD enzyme by obstructing the transfer of hydrogen atoms to the Testosterone (T) molecule and preventing its chemical reduction.

KÉRATENE® ^{alph^{active}} Retard reduces the DHT levels with a factor of 2, 3 or 4, depending on the total DHT level. KÉRATENE® ^{alph^{active}} Retard does not interfere with the endocrine production of hormones or with the production of the 5 α RD enzyme and its inhibition mechanism does not rely on the use of antagonistic exogenic hormone disruptors or on the use of xenoestrogens or estrogens.



cyclic androgen fluctuation

DHT variation graph, adult males with alopecia - systemic overall reference range



biochemically safe

KÉRATENE® ^{alph^{active}} reacts with the androgen metabolites within the biologically safe limits, depressing DHT levels at levels superior to 300 pg/mL but lower than the follicular sensitization threshold of 980 units, unlike synthetic alternatives from the -steride group that severely reduce DHT far below the safe limits, especially at adult males.

KÉRATENE® ^{alph^{active}} has a Xenoestradol- & phytoestrogen-free formula, chemically-neutral and inactive to the sex steroid-binding globulin (SSBG), luteinizing hormone (lutropin LT) or follicle-stimulating hormone (FSH). The normal testosterone (T) levels are also not affected.

Biological DHT levels	250 pg/mL : minimum low, gynaecomastia trigger
	350 - 750 pg/mL : normal
	980 pg/mL : follicular sensitization threshold
	Adult men with NW1,2,3,4 show elevated DHT levels of 1427 pg/mL or more

active ingredients

The active ingredients in KÉRATENE® ^{alph^{active}} Retard are combined with selective catalyse aggregators and phytoextracts, used with specific and direct systemic action:

- 5 α RD enzyme-specific catalyse inhibitor (complex sterols)
- Catalyse aggregators
- non-specific Cyclooxygenase enzyme inhibitor (oleocanthol-based complex sterols)
- Anti-inflammatory triterpenoid esters (cholestatin-based sterols, campe- stigma- brassicasterol)
- Immunomodulating actives (uterotropic constituent 5-hydroxytryptamine, cytokine inhibitor 3,4-divanillyltetrahydrofuran)

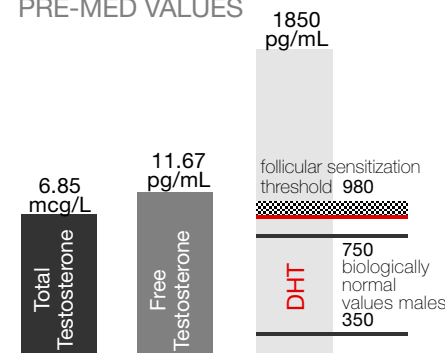
the results

KÉRATENE® ^{alph^{active}} Retard provides a "control and delay" mechanism of the effects of DHT on the hair follicles by depressing the overall androgen level present in the body, while preserving* its values within the biologically-safe limits, without increased risks for the formation of gynaecomastia and without impacting the tangential endocrine contributors, eg. hormones and precursors.

* in sustained therapy

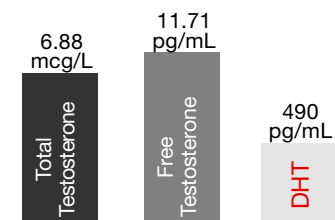
COMPARATIVE CHART ANDROGEN LEVELS ADULT MALES w ALOPECIA
presented values based on the average measurements performed prior to and during the in vivo clinical tests with Kératene alphactive Retard

PRE-MED VALUES



POST-MED VALUES

after 12-day continuous therapy KÉRATENE® ^{alph^{active}} Retard



OVERALL TREND

TT / FT variations within normal daily fluctuation

TT → not affected

FT → not affected

DHT → depressed

ADRF 3.7x

ADRF: average DHT reduction factor