# DHEA, HRP conjugate

*DAG1081*

*Lot. No. (See product label)*

## PRODUCT INFORMATION

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| ***Product overview*** | DHEA, HRP conjugate |
| ***Antigen Description*** | Dehydroepiandrosterone is the most abundant adrenal androgen in humans and exists predominately in a sulfated form (DHEAS). DHEA sulfotransferase, known as SULT2A1, converts the androgen precursor DHEA to its inactive sulfate ester, DHEAS. The unconjugated molecules can be converted directly to androgens. Dehydroepiandrosterone is converted to DHEAS in the adrenal glands and liver. DHEA in adults is present at plasma concentrations 100 to 500 times higher than those of testosterone. DHEA can be metabolized to androgens and/or estrogens in the prostate. Hepatic metabolites include 16α-hydroxy-DHEA, 7α-hydroxy-DHEA, and 7-oxo-DHEA. 7beta-OH-DHEA is a metabolite. The major metabolite produced in humans is a mono-hydroxylated DHEA species. Synthesis of a 7α-hydroxy-DHEA and 5-androstene-3β, 17β-diol occurs in the frontal cortex, hippocampus, amygdala, cerebellum and striatum. |
| ***Source*** | Natural Steroids |
| ***Conjugate*** | HRP |
| ***Form*** | concentrate |
| ***Characteristic*** | Each conjugate comprises antigen covalently bound to horseradish peroxide and is suitable as a tracer in immunoassay development |

## PACKAGING

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| ***Storage*** | Can be stored at 2-8°C for up to 3 months and at -20°C for longer term storage. |

## BACKGROUND

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| ***Introduction*** | Dehydroepiandrosterone is an important endogenous steroid hormone. It is the most abundant circulating steroid in humans, in whom it is produced in the adrenal glands, the gonads, and the brain, where it functions predominantly as a metabolic intermediate in the biosynthesis of the androgen and estrogen sex steroids. However, DHEA also been implicated in possessing a broad array of biological effects in its own right, binding to an array of nuclear and cell surface receptors, and acting as a neurosteroid. |
| ***Keywords*** | Dehydroepiandrosterone; DHEA; Fidelin; androstenolone; prasterone; 3β-hydroxyandrost-5-en-17-one; 5-androsten-3β-ol-17-one; (3S,8R,9S,10R,13S,14S)-3-hydroxy-10,13-dimethyl-1,2,3,4,7,8,9,11,12,14,15,16-dodecahydrocyclopenta[a]phenanthren-17-one |

## REFERENCES

1. Weiss EP, Shah K, Fontana L, Lambert CP, Holloszy JO, Villareal DT (2009) Dehydroepiandrosterone replacement therapy in older adults; 1-2y effects on bone. Am J Clin Nutr. 89(5): 1459-67 (0798/lr/0001). 2. Noordam C, Dhir V, McNelis JC , Schlereth F, Hanley NA, Krone N, Smetitink JA, Smeets R, Sweep FCGJ, Claahsen-van der Griten HL, Arlt W (2009) Inactivating PAPSS2 metations in a patients with premature pubarche. The New England Journal of Medicine. 360:2310-8 (0798/lr/0002). 3. Gray NE, Liu X, Choi R, Blackman MR, Arnold JT (2009) Endocrine-immune-paracrine interactions in prostate cells: A model for mechanistic studies of phytomedicines. Cancer Prev Res (Phila PA). 2(2): 134-42 (0798/lr/0003). 4. Fitzpatrick JL, Ripp SL, Smith NB, Pierce WM Jr, Prough R (2001) Metabolism of DHEA by cytochromes P450 in rat amd human liver microsomal fractions. Archives of Biochemistry and Biophysics. 389(2): 278-87 (0798/lr/0004). 5. Matsuzaki Y, Yoshida S, Honda A, Miyazaki T, Tanaka N, Takagiwa A, Fujimoto Y, Miyazaki H. Simultaneous determination of Dehydropiandrosterone and its 7-oxygenated metabolites in human serum by high- resolution gas chromatography – mass spectrometry. Steroids. 2004 Dec; 69(13-14):817-24. PMID: 15582537 (0798/lr/0005). 6. Weill-Emgerer S, David JP, Sazdovitch V, Liere P, Schumacher M, Delacourte A, Baulieu


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EE, Akwa Y (2003) Invitro metabolism of dehydroepiandrosterone (DHEA) amd 5-amdrotene-3, 17-diol in specific regions of the aging brain from Alzheimer's and non-demented patients. Brain Research. 969(1-2) 117-25 (0798/lr/0006).


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