# PRODUCT INFORMATION



## Dehydroepiandrosterone Sulfate (sodium salt)

Item No. 15873

CAS Registry No.: 1099-87-2

3β-(sulfooxy)-androst-5-en-17-one, Formal Name:

monosodium salt

Synonyms: DHA-S, DHEAS, NSC 72822

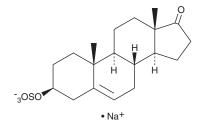
MF: C<sub>19</sub>H<sub>27</sub>O<sub>5</sub>S • Na

FW: 390.5 **Purity:** ≥98%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



#### **Laboratory Procedures**

Dehydroepiandrosterone sulfate (DHEAS) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the DHEAS (sodium salt) in the solvent of choice, which should be purged with an inert gas. DHEAS (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of DHEAS (sodium salt) in ethanol is approximately 2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

DHEAS (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DHEAS (sodium salt) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. DHEAS (sodium salt) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Dehydroepiandrosterone sulfate (DHEAS) is a metabolite of dehydroepiandrosterone that is the major secretory product of adrenal glands and is the predominant circulating precursor for active steroid hormones in humans. For example, in the fetoplacental-maternal unit, DHEAS acts as the primary precursor for placental estrogen biosynthesis.<sup>2</sup> A normal circulating concentration of DHEAS is ~10 μM in young adults and is dramatically increased in some adrenocortical disorders.<sup>1</sup>

### References

- 1. Neunzig, J. and Bernhardt, R. Dehydroepiandrosterone sulfate (DHEAS) stimulates the first step in the biosynthesis of steroid hormones. PLoS One 9(2), e89727 (2014).
- 2. Chang, H.J., Shi, R., Rehse, P., et al. Identifying androsterone (ADT) as a cognate substrate for human dehydroepiandrosterone sulfotransferase (DHEA-ST) important for steroid homeostasis: Structure of the enzyme-ADT complex. J. Biol. Chem. 279(4), 2689-2696 (2004).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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