

# AdreCor

Contains non-glandular ingredients important for adrenal health and reducing stress-induced fatigue\*

Item Number	Dosage Forms	Available Sizes	Serving Size
2096	- Capsules	90 Capsules	3 Capsules
2044		180 Capsules	



# Key Ingredients

L-methionine

- Precursor to S-adenosylmethionine (SAMe)<sup>1</sup>
- SAMe is directly involved in methylation processes including catecholamine synthesis<sup>2</sup>

L-tyrosine

 Precursor to catecholamines including dopamine, norepinephrine, and epinephrine

L-histidine

- Precursor to histamine
- In the central nervous system, histamine plays an important role in the release of pituitary hormones and wakefulness<sup>3</sup>

Rhodiola rosea root extract (5% rosavins)

 Adaptogen that has been shown to reduce stress-induced effects<sup>4,5\*</sup>

Green tea leaf extract (Camellia sinensis) (65% EGCG)

- Epigallocatechin gallate (EGCG) is a polyphenol in green tea that provides antioxidant protection by its ability to scavenge free radicals and metal ions<sup>6\*</sup>
- EGCG has been shown to increase resistance to fatigue in vivo<sup>7\*</sup>

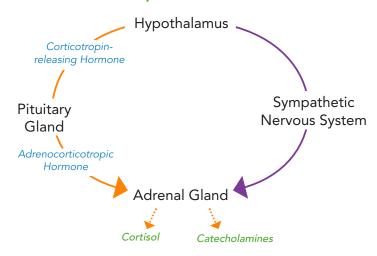
Vitamins B and C

Active forms of pantothenic acid, niacin, B6, folate, B12, and C are important for the synthesis of adrenal hormones and neurotransmitters<sup>8-12\*</sup>

### The Science

- In response to stress, the sympathetic nervous system (SNS) and hypothalamic-pituitary-adrenal (HPA) axis signal to the adrenals to release catecholamines (norepinephrine and epinephrine) and cortisol<sup>13</sup>
- Prolonged stress is associated with dysregulation of the HPA axis, which can affect catecholamine and cortisol levels<sup>14</sup>

### NeuroAdrenal Response



Green = Biomarker

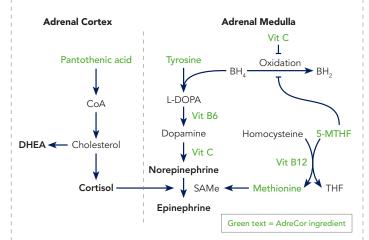
Blue = Hormone

Orange = Hypothalamic-Pituitary-Adrenal (HPA) axis Purple = Sympathomedullary Pathway

\*These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure or prevent any disease.

## SCIENCE BEHIND ADRE

Figure 1. Adrenal Hormones and Neurotransmitters



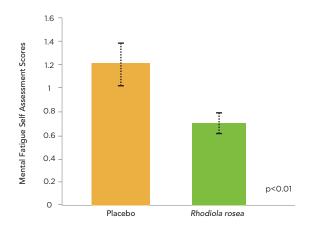
#### AdreCor and Adrenal Health

Contains amino acids and vitamins important for the synthesis of adrenal hormones and neurotransmitters\*

- 5-MTHF (from Quatrefolic®) and vitamin B12 are important for methylation processes including the synthesis of catecholamines 11,15\*
- Niacin, vitamin C, and 5-MTHF help protect and regenerate tetrahydrobiopterin (BH<sub>4</sub>) from oxidation<sup>9-11\*</sup>
- Pantothenic acid is the precursor to coenzyme A (CoA), a coenzyme important for the energy production and hormone synthesis8\*
- Cortisol induces the conversion of norepinephrine to epinephrine<sup>16</sup>

Catecholamines play an important role in mood, energy, memory, attention and cognition 16-19

Figure 2. Rhodiola rosea Improves Mental Fatigue5\*



#### Catecholamines, Stress, and Fatigue

Catecholamines are involved in the central and peripheral stress responses15

- The locus coeruleus is the primary source of norepinephrine in the brain and is involved in the initiation of the central stress response<sup>16</sup>
- Depletion in catecholamines has been associated with fatigue and decreased vigor<sup>18</sup>

AdreCor contains ingredients important for reducing stress-related fatigue and increasing norepinephrine\*

- In a randomized, double-bind, placebo-controlled study, Rhodiola rosea was shown to significantly improve mental fatigue and general well-being under stress (Figure 2.)5\*
- A meta-analysis demonstrated a significant increase in norepinephrine following the use of AdreCor (p<0.0001)21\*





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#### Concerned about mood?

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  Data on file. 2017. NeuroScience, Inc., Osceola, WI 54020.
- ‡ This product uses Gnosis S.p.A.'s (6S)-5-methyltetrahydrofolic acid, glucosamine salt (Quatrefolic®) and is protected by U.S. Patent No. 7,947,662. Quatrefolic is a registered trademark of Gnosis S.p.A., Milan, Italy.

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