

# AdreCor

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

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



## Key Ingredients

L-methionine

- Precursor to S-adenosylmethionine (SAMe)1
- SAMe is directly involved in methylation processes including catecholamine synthesis2

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 ions6\*
- EGCG has been shown to increase resistance to fatigue in vivo7\*

Vitamins B and C

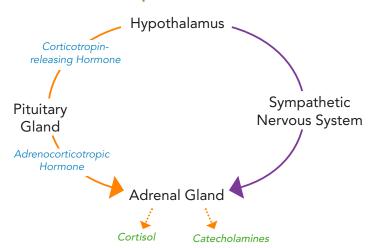
Active forms of pantothenic acid, niacin, B6, folate, B12, and C are important for the synthesis of adrenal hormones and neurotransmitters8-12\*

## 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
- Prolonged stress is associated with dysregulation of the HPA axis, which can affect catecholamine and cortisol levels14

### NeuroAdrenal Response



Green = Biomarker

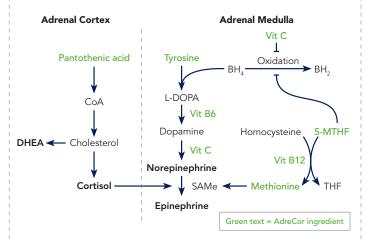
Blue = Hormone

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



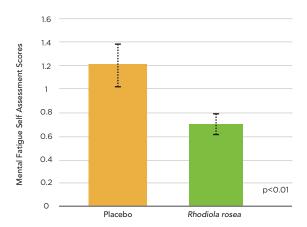
#### AdreCor and adrenal health

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

- 5-MTHF and vitamin B12 are important for methylation processes including the synthesis of catecholamines<sup>11,15\*</sup>
- 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<sup>16-19</sup>

Figure 2. Rhodiola rosea Improves Mental Fatigue5\*



### Catecholamines, stress, and fatigue

Catecholamines are involved in the central and peripheral stress responses<sup>15</sup>

- 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 vigor18

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

- Research shows Rhodiola rosea was shown to improve mental fatigue and general well-being under stress (Figure 2.)5\*
- A data analysis demonstrated an increase in norepinephrine following the use of AdreCor (p<0.0001)21\*







- Duncan T, et al. Mol Nutr Food Res. 2013;57(4):628-36.
  Mischoulon D and Fava M. Am J Clin Nutr. 2002;76(5):1158S-61S.
  Krystal A, et al. Sleep Med Rev. 2013;17(4):263-72.
  Chiang H, et al. J Food Drug Anal. 2015;23(3):359-69.
  Spasov A, et al. Phytomedicine. 2000;7(2):85-9.
  Legeay S, et al. Nutrients. 2015;7(7):543-68.
  Teng Y and Wu D. Pharmacogn Mag. 2017;13(50):326-31.
  Ragaller V, et al. J Anim Physiol Anim Nutr (Berl). 2011;95(1):6-16.
  Vrecko K, et al. Biochim Biophys Acta. 1997;135(1):59-65.
  May J, et al. Brain Res Bull. 2013;90:35-42.
  Antoniades C, et al. Circulation. 2006;114(11):1193-201.



### Concerned about mood?

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- Dakshinamurti K. Ann NY Acad Sci. 1990;585:128-44.
  Lee D, et al. BMB Rep. 2015;48(4):209-16.
  Krizanova O, et al. Stress. 2016;19(4):419-28.
  Mattson M and Shea T. Trends Neurosci. 2003;26(3):137-46.
  Kvetnansky R, et al. Physiol. Rev. 2009;89(2):535-606.
  Blier P. J Psychiatry Neurosci. 2001;26 Suppl:51-2.
  Verhoeff N, et al. Pharmacol Biochem Behav. 2003;74(2):425-32.
  Xing B, et al. Brain Res. 2016;1641 (Pt B):217-33.
  Clark K and Noudoost B. Front Neural Circuits. 2014;8:33.
  Data on file. 2017. NeuroScience, Inc., Osceola, WI 54020.

<sup>‡</sup> Magnafolate is a registered trademark of Lianyungang Jinkang Pharmaceutical Technology Co., Ltd.

<sup>\*</sup>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.