



CARDARINE

CARDARINE USP 20 mg
Presented as blister with 60 capsules

DESCRIPTION

Cardarine, also known as GW501516 or Endurobol, is a PPAR (peroxisome proliferator-activated receptor) agonist and ligand-activated transcription factor that binds to receptors in skeletal muscle tissue and body fat and pushes skeletal muscle cells towards preferential lipid utilization and fat burning. PPAR is also involved in inflammation, glucose homeostasis, as well as cell proliferation, differentiation, and apoptosis, suggesting potential anti-aging effects of PPAR agonists. PPAR are located in greatest concentration in tissues with high metabolic rates like skeletal muscle, intestine, liver, heart, and kidney.

MECHANISM OF ACTION

Cardarine is also known by a number of alternate names, including GW1516 and GSK-516. It displays high affinity ($K_i = 1 \text{ nM}$) and potency for PPAR δ with over 1,000-fold selectivity over PPAR α and PPAR γ . Binding of GW501516 to PPAR δ recruits the coactivator PGC-1 α . The PPAR δ /coactivator complex in turn upregulates the expression of proteins involved in energy expenditure. By activating AMP-activated protein kinase, it is widely believed to provide a broad range of experimental effects currently being tested in research such as:

- Increases fatty acid oxidation and promotes fat loss
- Lower LDL cholesterol ("bad cholesterol")
- Higher HDL cholesterol ("good cholesterol")
- Increases endurance
- Reduces inflammation
- Decreases insulin resistance and improves glucose tolerance

FUNCTION OF PPAR AGONISTS

Data indicates that PPAR activity preserves glucose for use in tissues like the brain while promoting the mobilization of fatty acids for muscular endurance. PPAR has also been observed to play an important role in temperature regulation, inflammation mediation, mitochondrial respiration, keratinocyte differentiation, and skin and muscle repair. Molecular analyses revealed that PPAR regulates the expression of genes associated with contractile proteins, lipid oxidation, and mitochondrial biogenesis.

PPAR EFFECTS DURING FASTING

The effects of PPAR are observed in particular during fasting, when free fatty acids are released into the blood. A study in PPAR-null mice demonstrated that the absence of PPAR results in elevated free fatty acids during fasting, lipid accumulation in the liver and heart, low blood sugar, low body temperature, ketones in urine, and ultimately a premature death. Mice naturally adapt to high free fatty acid levels during fasting through induction of cardiac and hepatic PPAR genes that improve fatty acid uptake and oxidation.

The benefits and side effects of GW501516 however, have not been confirmed by the Food and Drug Administration (FDA) and like other SARMs for sale, it should be used for research purposes only. Due to its tendency to increase endurance and energy, the World Anti Doping Agency (WADA) has banned the use of Cardarine in professional sports and several athletes have tested positive for Cardarine and were dismissed as this chemical is only for researchers and clinical trials.

PRESENTATION

20mg capsules in blister packs of 15 capsules – 4 blisters per box (60 capsules).

STORAGE

Store below 25°C. Store in the original package.