Cilnidipine is a dihydropyridine that exhibits antihypertensive, vasodilatory, antinociceptive, and nephroprotective activities. Cilnidipine acts as an antagonist at L-type and N-type voltage-gated Ca²⁺ channels. In subjects with hypertension, cilnidipine decreases blood pressure and urinary albumin excretion. Cilnidipine also increases expression of eNOS ex vivo in thoracic arteries. In animal models of non insulin-dependent diabetes, cilnidipine improves insulin sensitivity, indicating potential anti-diabetic activity as well. This compound inhibits nociception in animal models undergoing the formalin test. Additionally, in vitro, cilnidipine decreases production of AP-1, TGF-β, and fibronectin, inhibiting proliferation of mesangial cells; in similar animal models, cilnidipine inhibits progression of glomerulonephritis.

References


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.