Benfotiamine is a synthetic, lipid-soluble derivative of the B vitamin thiamine. Benfotiamine exhibits antinociceptive, neuroprotective, and anti-inflammatory activities. In animal models, benfotiamine inhibits pain signaling in a prostatic acid phosphatase-dependent manner. In vitro, benfotiamine decreases production of amyloid-β (Aβ) and downregulates activity of glycogen synthase kinase 3 (GSK3). In macrophages, this compound inhibits LPS-induced activation of phospholipase A2 (PLA2), release of leukotrienes, prostaglandins, and thromboxane B2 (TxB2), and also suppresses oxidative stress. Benfotiamine also decreases oxidative stress induced by streptozocin in animal models.

References


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