Spinorphin is a heptapeptide with the sequence L-V-V-Y-P-W-T. Spinorphin is an endogenous enkephalinase inhibitor, antagonizing enzymes such as aminopeptidase IV, neutral endopeptidase, dipeptidyl peptidase III (DPP3), and angiotensin-converting enzyme (ACE); it also acts as an antagonist at the P2X3 receptor. Spinorphin exhibits antinociceptive, antidepressant, gastrointestinal motility modulating, anti-inflammatory, and immunomodulatory activities. Spinorphin also acts as an antagonist at N-formylpeptide receptors, preventing binding of chemotactic f-MLF to its receptor on polymorphonuclear (PMN) neutrophils and inhibiting neutrophil functionality.

References


