WKYMVM is a synthetic hexapeptide that exhibits anti-inflammatory and immunostimulatory activities. In vitro, WKYMVM activates formyl peptide receptor-like 1 (FPRL1) receptors, increasing Ca2+ influx. WKYMVM also increases bactericidal activity of neutrophils and phagocytic activity of dendritic cells, especially in subjects with cancer. WKYMVM inhibits production of TNF-α, IL-1β, and IL-6 and increases production of IFN-γ, IL-12, IL-17, and TGF-β in animal models of sepsis. In other models, this peptide decreases production of IL-23 and TGF-β in a formyl peptide receptor 2 (FPR2)-dependent manner, decreasing intestinal permeability and increasing colon epithelial cell proliferation.

References


