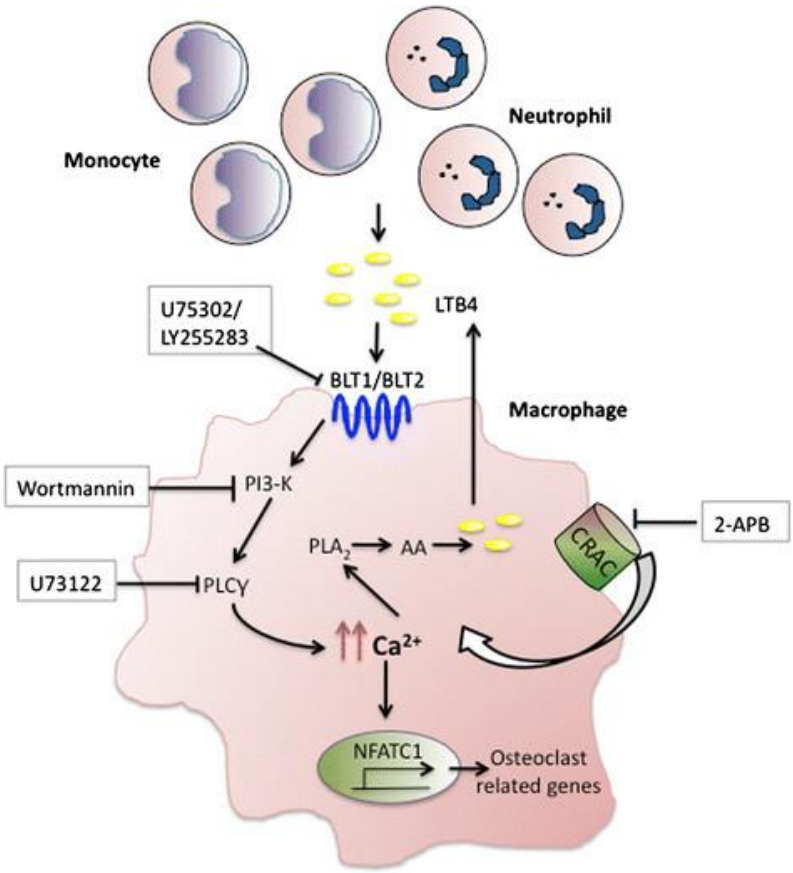

Schematic representation of leukotriene B4 signaling events augmenting osteoclastogenesis. Interleukin 23 (IL-23) induction of neutrophils and monocytes leads to the release of leukotriene B4 (LTB4), which associates with its G protein–coupled receptors (GPCRs) BLT1/BLT2 on macrophages to initiate calcium flux via cooperation between phospholipase C (PLC) and calcium release–activated channel (CRAC). Elevated intracellular calcium can then activate nuclear factor of activated T-cells, cyto-plasmic 1 (NFATC1), and trigger osteoclastogenesis and also phosphorylate phospholipase A2 (PLA2) to further stimulate the production of LTB4 via an autocrine pathway. Thus, these pathways can lead to continuous production of LTB4, leading to enhanced osteoclastogenesis and exacerbation of the inflammatory milieu. To simplify the diagram, IL-23R pathway is not depicted in the schematic. AA, Arachidonic acid; 2-APB, 2-Aminoethoxydiphenyl borate; PI3-K, Phosphatidylinositol 3-kinase.

Source: ResearchGate.net

https://tinyurl.com/Leukotriene-B4

excerpted from Dixit et al (2014)