Open Peer Review on Qeios

Brepocitinib

National Cancer Institute

Source

National Cancer Institute. <u>Brepocitinib</u>. NCI Thesaurus. Code C161798.

An orally available, selective inhibitor of non-receptor tyrosine-protein kinase TYK2 (tyrosine kinase 2) and tyrosine-protein kinase JAK1 (Janus kinase 1; JAK1) with potential immunomodulatory and anti-inflammatory activities. Upon oral administration, brepocitinib selectively binds to and inhibits the activation of TYK2 and JAK1, thereby disrupting TYK2 and JAK-1-dependent cytokine signaling. This may reduce inflammatory responses and prevent inflammation-induced damage caused by certain immunological diseases. TYK2 and JAK-1 are members of the Janus kinase family of non-receptor tyrosine kinases and are involved in signaling pathways affecting hematopoiesis, immunity and inflammation.