Ibudilast is an inhibitor of phosphodiesterases 3 and 5 (PDE3/5) that also inhibits the leukotriene D4 (LTD4) receptor in airway smooth muscle cells. Ibudilast exhibits vasodilatory, anti-inflammatory, anti-asthma, anti-platelet, analgesic, and antinociceptive activities. In clinical settings, ibudilast increases cerebral blood flow in several brain regions after ischemic stroke. Ibudilast also non-competitively inhibits the functions of pro-inflammatory macrophage migration inhibitory factor (MIF), preventing glial cell activation. In other cellular models, ibudilast decreases activation of NF-κB, inhibiting HIV-1 Tat-induced production of TNF-α.

**References**


Ohashi M, Ohkubo H, Kito J, et al. A new vasodilator 3-isobutyl-2-isopropylpyrazolo[1,5-a]pyridine (KC-404) has a...