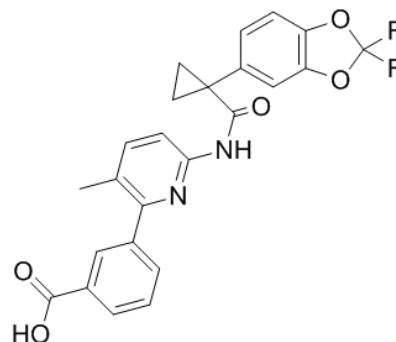


Product Name : Lumacaftor
Cat. No. : PC-43442
CAS No. : 936727-05-8
Molecular Formula : C₂₄H₁₈F₂N₂O₅
Molecular Weight : 452.41
Target : CFTR
Solubility : 10 mM in DMSO



Biological Activity

VX-809 (Lumacaftor, VRT 826809) is a potent **CFTR corrector** that increases F508del-CFTR-mediated chloride transport and improves F508del-CFTR maturation in FRT cells with EC₅₀ of 0.1 and 0.5 μM, respectively, also inhibits dual specificity phosphatase 18 (**DUSP18**).

VX-809 (Lumacaftor, VRT 826809) improves F508del-CFTR processing in the endoplasmic reticulum and enhances chloride secretion to approximately 14% of non-CF human bronchial epithelial cells (EC₅₀=81 nM).

VX-809 (Lumacaftor, VRT 826809) exhibits biochemical and functional characteristics similar to normal CFTR, including biochemical susceptibility to proteolysis, residence time in the plasma membrane, and single-channel open probability after F508del-CFTR corrected by VX-809.

VX-809 (Lumacaftor, VRT 826809) inhibits CRC growth in mice and synergistically enhances anti-tumor immunity when combined with an anti-PD-1 antibody.

References

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Farinha CM, et al. *Chem Biol*. 2013 Jul 25;20(7):943-55.

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Caution: Product has not been fully validated for medical applications. Lab Use Only!

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