



Product Specification Sheet

Product Name: VX-809 (Lumacaftor)

Catalog Number: C8980

Technical information:

Chemical Formula: $C_{24}H_{18}F_2N_2O_5$

CAS #: 936727-05-8

Molecular Weight: 452.41

Purity: > 98%

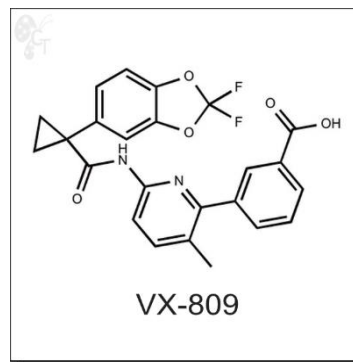
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 3-(6-(1-(2,2-difluorobenzo[d][1,3]dioxol-5-yl)cyclopropanecarboxamido)-3-methylpyridin-2-yl)benzoic acid

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.221mL of DMSO for each mg of VX-809 (Lumacaftor).
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: VX-809 (Lumacaftor) is a small molecular corrector and rescues folding defects of F508del mutation in cystic fibrosis transmembrane conductance regulator (CFTR). F508del is the most frequent mutation in CFTR gene that leads to cystic fibrosis (CF). VX-809 (Lumacaftor) directly binds to the pocket created by the deleted F508 in CFTR and promotes the cellular processing and maturation of F508del-CFTR in primary human bronchial epithelia (EC50 81 nM). [1] [2] VX-809 (Lumacaftor) has been approved for cystic fibrosis treatment and also subjected to multiple Phase III clinical trials in cystic fibrosis patients. [3] [4]

- Reference:**
1. Van Goor F, et al. Correction of the F508del-CFTR protein processing defect in vitro by the investigational drug VX-809. Proc Natl Acad Sci U S A. 2011; 108(46):18843-8 Pubmed ID: 21976485
 2. Okiyoneda T, et al. Mechanism-based corrector combination restores Δ F508-CFTR folding and function. Nat Chem Biol. 2013; 9(7):444-54 Pubmed ID: 23666117
 3. <https://clinicaltrials.gov/show/NCT02544451> Pubmed ID: NCT02544451
 4. <https://clinicaltrials.gov/show/NCT02514473> Pubmed ID: NCT02514473

To reorder: <http://www.cellagentech.com/VX-809-Lumacaftor/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.