

Product Name : Alvelestat

Synonyms : AZD-9668; MPH966; Alvelestat

Cat No. : M17609

**CAS Number** : 848141-11-7

Molecular Formula : C25H22F3N5O4S

Formula Weight : 545.53

Description

Chemical Name
6-methyl-5-(1-methyl-1H-pyrazol-5-yl)-N-((5-(methylsulfonyl)pyridin-2-yl)methyl)-2-oxo-1-(3-(trifluoromethyl)phenyl)-1,2-

dihydropyridine-3-carboxamide

Avelestat, also known as AZD9668 and MPH-966, is a novel, oral inhibitor of neutrophil elastase (NE), an enzyme implicated in the signs, symptoms, and disease progression in NE-driven respiratory diseases such as bronchiectasis and

chronic obstructive pulmonary disease via its role in the inflammatory process, mucus overproduction, and lung tissue

damage. In cell-based assays, AZD9668 inhibited plasma NE activity in zymosan-stimulated whole blood. AZD9668 has the

potential to reduce lung inflammation and the associated structural and functional changes in human diseases.

Pathway : Proteasome/Ubiquitin

Target : Proteasome

Receptor : neutrophil elastase; neutrophil elastase

**Solubility** : DMSO :  $\geq$  33 mg/mL; 60.49 mM

SMILES : c1(n(c(=0)c(cc1c1n(ncc1)C)C(=0)NCc1ccc(cn1)S(=0)(=0)C)c1cc(ccc1)C(F)(F)F)C

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Stevens T, et al. J Pharmacol Exp Ther. 2011, 339(1), 313-320.