Sivelestat sodium

Cat. No.: HY-17443A
CAS No.: 150374-95-1
Molecular Formula: C₂₀H₂₁N₂NaO₇S
Molecular Weight: 456.44
Target: Elastase
Pathway: Metabolic Enzyme/Protease
Storage: Please store the product under the recommended conditions in the COA.

**BIOLOGICAL ACTIVITY**

**Description**
Sivelestat sodium (ONO5046; LY544349; EI546) is a competitive inhibitor of human neutrophil elastase (IC₅₀ = 44 nM; Kᵢ = 200 nM); also inhibited leukocyte elastase obtained from rabbit, rat, hamster and mouse. IC₅₀ value: 44 nM [1] Target: neutrophil elastase

ONO-5046 did not inhibit trypsin, thrombin, plasmin, plasma kallikrein, pancreas kallikrein, chymotrypsin and cathepsin G even at 100 microM. In in vivo studies, ONO-5046 suppressed lung hemorrhage in hamster (ID₅₀ = 82 micrograms/kg) by intratracheal administration and increase of skin capillary permeability in guinea pig (ID₅₀ = 9.6 mg/kg) by intravenous administration, both of which were induced by human neutrophil elastase [1]. Sivelestat sodium hydrate is an anti-neutrophil elastase inhibitor and may be one of the treatment options for acute respiratory failure due to pneumocystis pneumonia in AIDS patients [2].

**REFERENCES**
