



Catalog # 10-1102

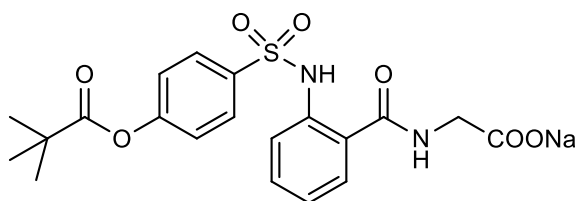
Sivelestat

150374-95-1

N-{2-[(4-[(2,2-Dimethylpropanoyl)oxy]phenyl)sulfonyl]amino]benzoyl}glycine sodium

ONO-5046

Lot # FBS1070



Potent and selective leukocyte elastase inhibitor, $IC_{50} = 44 \text{ nM}$.¹ Displays no activity at a variety of other proteases. Inhibits NF- κ B activation leading to decreased serum cytokine levels² and LTB₄-induced neutrophil migration *in vitro*³. Significantly attenuates ischemia-induced spinal cord injury⁴ and reduces acute inflammatory lung injury *in vivo*⁵.

- 1) Kawabata *et al.* (1991), *ONO-5046, a novel inhibitor of human neutrophil elastase*; Biochem. Biophys. Res. Commun., **177** 814
- 2) Hagiwara *et al.* (2009), *Neutrophil elastase inhibitor (sivelestat) reduces the levels of inflammatory mediators by inhibiting NF κ B*; Inflamm. Res., **58** 198
- 3) Young *et al.* (2007), *Role of neutrophil elastase in LTB₄-induced neutrophil transmigration in vivo assessed with a specific inhibitor and neutrophil elastase deficient mice*; Br. J. Pharmacol., **151** 628
- 4) Iwamoto *et al.* (2009), *Protective effect of sivelestat sodium hydrate (ONO-5046) on ischemic spinal cord injury*; Interact. Cardiovasc. Thorac. Surg., **8** 606
- 5) Iwata *et al.* (2010), *Effect of neutrophil elastase inhibitor (sivelestat sodium) in the treatment of acute lung injury (ALI) and acute respiratory distress syndrome (ARDS): a systematic review and meta-analysis*; Intern.Med. **49** 2423

PHYSICAL DATA

Molecular Weight:	456.45
Molecular Formula:	C ₂₀ H ₂₁ N ₂ O ₇ ·Na
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

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