

## **Data Sheet**

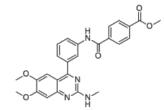
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Product Name : Lotamilast
Cat. No. : PC-61387
CAS No. : 947620-48-6
Molecular Formula : C<sub>26</sub>H<sub>24</sub>N<sub>4</sub>O<sub>5</sub>
Molecular Weight : 472.501

**Target** : Phosphodiesterase (PDE)

**Solubility** : 10 mM in DMSO



## **Biological Activity**

Lotamilast (RVT 501, E6005) is a potent, selective **PDE4** inhibitor with IC50 of 2.8 nM, suppresses the production of various cytokines from human lymphocytes and monocytes with IC50 of 0.49-3.1 nM.

Lotamilast (RVT 501, E6005) produces an immediate antipruritic effect as well as an anti-inflammatory effect with reduced expression of cytokines/adhesion molecules in mice after topical application.

Lotamilast (RVT 501, E6005) ameliorates the appearance of atopic dermatitis-like skin lesions in AD models.

## References

Ishii N, et al. *J Pharmacol Exp Ther*. 2013 Jul;346(1):105-12.

Andoh T, et al. *Exp Dermatol*. 2014 May;23(5):359-61. Kubota S, et al. *Eur J Pharmacol*. 2015 Dec 5;768:41-8.

Furue M, et al. *Expert Opin Investig Drugs*. 2017 Dec;26(12):1403-1408.

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

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