



## **Fagomine**

Catalog No: tcsc0365

Z A	vailable Sizes
Size: 2m	ng
Size: 5m	ng
Size: 10	mg
S	pecifications
<b>CAS No:</b> 53185-12	
Formula C <sub>6</sub> H <sub>13</sub> NC	
<b>Pathwa</b> Others	y:
<b>Target:</b> Others	
<b>Purity</b> / >98%	Grade:
<b>Solubili</b> t H2O : ≥	<b>ty:</b> 36 mg/mL (244.62 mM)
<b>Alternat</b> D-Fagor	tive Names: nine
<b>Observe</b> 147.17	ed Molecular Weight:
Produ	ct Description





Fagomine is a mild **glycosidase** inhibitor. The  $\mathbf{K_i}$  of the iminosugar Fagomine is 4.8  $\mu$ M, 39  $\mu$ M, and 70  $\mu$ M for Amyloglucosidase (A. *niger*),  $\beta$ -Glucosidase (bovine), and Isomaltase (yeast), respectively.

IC50 & Target: Glycosidase<sup>[1]</sup>

*In Vitro:* Fagomine (D-fagomine) is an iminosugar that has been shown to selectively agglutinate Enterobacteriales in vitro. Fagomine selectively agglutinates fimbriated enterobacteria (e.g., *E.coli*) and inhibits their adhesion to the intestinal mucosa; the reason for this is probably related to its structural similarity with lectin-binding saccharides (e.g., mannose). Fagomine is capable of altering this effect of high-fat high-sucrose diet (HFHS) on the proportion of Enterobacteriales and *E.coli*<sup>[2]</sup>.

*In Vivo:* Fagomine (D-fagomine) is a natural iminosugar that counteracts the short-term effects of a high-energy-dense diet on body weight, fasting blood glucose levels and the proportion of gut Enterobacteriales<sup>[3]</sup>. Compare to the standard group, rats fed high-fat high-sucrose diet (HFHS) with Fagomine (D-fagomine) gain significantly less weight (15.3%) than those fed HFHS (20.9%)<sup>[2]</sup>.

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