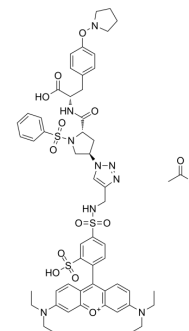


## R-BC154 acetate

<b>Cat. No.:</b>	HY-136214
<b>Molecular Formula:</b>	C <sub>56</sub> H <sub>65</sub> N <sub>9</sub> O <sub>14</sub> S <sub>3</sub>
<b>Molecular Weight:</b>	1184.36
<b>Target:</b>	Integrin
<b>Pathway:</b>	Cytoskeleton
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	R-BC154 acetate is a selective fluorescent $\alpha_9\beta_1$ integrin antagonist. R-BC154 acetate acts as a useful high affinity, activation dependent integrin probe, which can be used to investigate $\alpha_9\beta_1$ and $\alpha_4\beta_1$ integrin binding activity <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	$\alpha_9\beta_1$								
<b>In Vitro</b>	R-BC154 acetate has 3 times greater affinities for $\alpha_9\beta_1$ ( $K_i=12.7$ nM) relative to $\alpha_4\beta_1$ ( $K_i=38.0$ nM) under Ca <sup>2+</sup> /Mg <sup>2+</sup> conditions in human glioblastoma LN18 cell lines <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	R-BC154 acetate (10 mg/kg; i.v.) acts as an in vivo probe for bone marrow haemopoietic stem cells in mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>C57Bl/6 mice (6-8 weeks old)<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection</td> </tr> <tr> <td>Result:</td> <td>Was capable of binding haemopoietic progenitor cells and HSC within mice bone marrow in vivo.</td> </tr> </table>	Animal Model:	C57Bl/6 mice (6-8 weeks old) <sup>[1]</sup>	Dosage:	10 mg/kg	Administration:	Intravenous injection	Result:	Was capable of binding haemopoietic progenitor cells and HSC within mice bone marrow in vivo.
Animal Model:	C57Bl/6 mice (6-8 weeks old) <sup>[1]</sup>								
Dosage:	10 mg/kg								
Administration:	Intravenous injection								
Result:	Was capable of binding haemopoietic progenitor cells and HSC within mice bone marrow in vivo.								

### REFERENCES

[1]. Design, synthesis and binding properties of a fluorescent  $\alpha_9\beta_1/\alpha_4\beta_1$  integrin antagonist and its application as an in vivo probe for bone marrow haemopoietic stem cells. *Org Biomol Chem*. 2014 Feb 14;12(6):965-78.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA