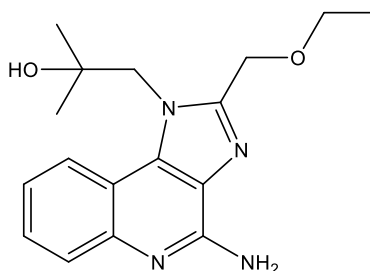


**Catalog # 10-2733**

**Resiquimod**

CAS# 144875-48-9

1-[4-Amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-2-methylpropan-2-ol; R848  
Lot # X1089032



A Toll-like receptor 7/8 agonist.<sup>1</sup> May be used as an immune adjuvant in cancer vaccines.<sup>2</sup> Resiquimod-carrying synthetic vaccine particles augment the immune response to encapsulated antigen and exhibit strong local immune activation without inducing systemic cytokine release.<sup>3</sup> Topical treatment of wild-type mice induces systemic autoimmune disease which may be used as a model of systemic Lupus erythematosus.<sup>4</sup> It displayed potent antiviral activity ( $EC_{50} = 23.5$  nM) in a murine norovirus replicon model.<sup>5</sup>

- 1) Jurk *et al.* (2002), *Human TLR7 or TLR8 independently confer responsiveness to the antiviral compound R-848*; Nat.Immunol. **3** 499
- 2) Sabado *et al.* (2015), *Resiquimod as an immunologic adjuvant for NY-ESO-1 protein vaccination in patients with high-risk melanoma*; Cancer Immunol.Res. **3** 278
- 3) Ilyinskii *et al.* (2014), *Adjuvant-carrying synthetic vaccine particles augment the immune response to encapsulated antigen and exhibit strong local immune activation without inducing systemic cytokine release*; Vaccine **32** 2882
- 4) Yokogawa *et al.* (2014), *Epicutaneous application of toll-like receptor 7 agonists leads to systemic autoimmunity in wild-type mice: a new model of systemic Lupus erythematosus.*; Arthritis Rheumatol. **66** 694
- 5) Tuipulotu *et al.* (2018), *TLR7 Agonists Display Potent Antiviral Effects against Norovirus Infection via Innate Stimulation*; Antimicrob. Agents Chemother., **62** e02417

**PHYSICAL DATA**

Molecular Weight:	314.39
Molecular Formula:	C <sub>17</sub> H <sub>22</sub> N <sub>4</sub> O <sub>2</sub>
Purity:	98% by HPLC NMR: (Conforms)
Solubility:	Soluble in DMSO (>25 mg/mL) and Ethanol (15 mg/mL with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**