

Store at  
-20C  
#83597**Resiquimod (R-848)**

5 mg



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

**Background**

Resiquimod (R-848), an antiviral imidazoquinoline, has been shown to activate Toll-like receptor 7 (TLR7) and TLR8 via the MyD88-dependent interleukin 1 receptor (IL-1R)-TLR signaling pathway (1). Triggering of the TLR pathway leads to the activation of NF- $\kappa$ B and subsequent regulation of immune and inflammatory genes (2). Similar to CD40, treatment with Resiquimod (R-848) activates B cells and can induce nuclear translocation of NF- $\kappa$ B at a concentration of 1  $\mu$ g/ml (3).

**Molecular Formula**

C<sub>17</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub>

**Molecular Weight**

314.4 g/mol

**Purity**

>98%

**CAS**

144875-48-9

**Solubility**

Soluble in DMSO at 30 mg/ml or ethanol at 15 mg/ml with slight warming.

**Storage**

Store lyophilized at -20°C, desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, store at -20°C and use within 2 months to prevent loss of potency. *Aliquot to avoid multiple freeze/thaw cycles.*

**Directions for Use**

Resiquimod (R-848) is supplied as a lyophilized powder. For a 15 mM stock, reconstitute 5 mg of powder in 1.06 ml of DMSO. Working concentrations and length of treatment can vary depending on the desired effect.

**Background References**

1. Jurk, M. et al. (2002) *Nat Immunol* 3, 499.
2. Medzhitov, R. et al. (1997) *Nature* 388, 394-7.
3. Bishop, G.A. et al. (2000) *J Immunol* 165, 5552-7.

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