

# Product Datasheet

## Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand **NBP2-26231**

Unit Size: 0.5 mg

Store at -20 °C.

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**NBP2-26231**

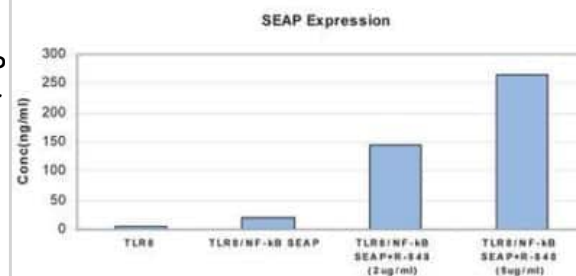
Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand

Product Information	
Unit Size	0.5 mg
Concentration	Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.
Storage	Store at -20 °C.
Reconstitution Instructions	Dissolve in DMSO at a concentration of 10 mg/ml. If the substance is not fully soluble, it can be heated up to 60C to ensure complete solubilization. Also soluble in dichloromethane, 100% or 5% methanol; poorly soluble in acetonitrile or ethyl acetate.
Purity	>98%, by HPLC.
Product Description	
Description	CAS#: 144875-48-9.
Species	Human
Reactivity Notes	Human reactivity reported in scientific literature (PMID: 25532693)
Product Application Details	
Applications	Functional
Recommended Dilutions	Functional
Application Notes	Identity determined by MS, 1H-NMR and 13C-NMR. This product is useful for activation of mouse TLR7 and human TLR7 and TLR8. Stimulation of TLR8 has been achieved with 0.5-5 ug/mL. Use in functional assays reported in scientific literature (PMID 26134251).

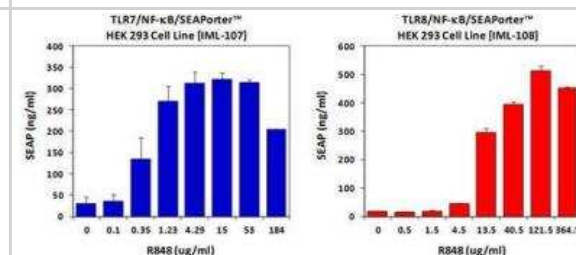


## Images

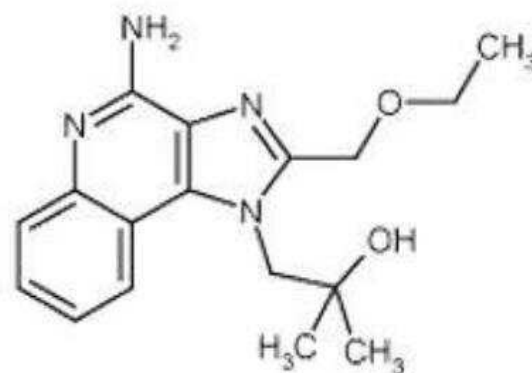
Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand [NBP2-26231] - TLR8 stimulation with R-848 measured by SEAP Expression  
293T cells were transfected with pCMV/TLR8 plasmid and pNF- $\kappa$ B/SEAP plasmid using Lipofectamin 2000. After 48 hrs of transfection, 2  $\mu$ g/mL or 5  $\mu$ g/mL of R-848 was added. Cells were incubated at 37C for 24 hrs. Transfected cell supernatant was collected and analyzed using NF- $\kappa$ B SEAPorterAssay kit.



Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand [NBP2-26231] - R-848 specifically activated the TLR7- or TLR8-depedent NF- $\kappa$ B/SEAP reporter cells in a dose dependent manner.



Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand [NBP2-26231] - Formula: C<sub>17</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub>



## Publications

Huang M, Cao XY, He QF et al. Alkaline semen diluent combined with R848 for separation and enrichment of dairy goat X-sperm Journal of dairy science 2022-10-18 [PMID: 36270871] (Func)

Flores-Torres AS, Rendon A, Salinas-Carmona MC Et al. Human Eosinophils Reduce Viral Titer, Secrete IL-8, and Increase RIG-I Expression in Response to Influenza A H1N1 pdm09 Viral immunology 2021-08-19 [PMID: 34415814]

Valenzuela RA, Suter SR, Ball-Jones AA et al. Base modification strategies to modulate immune stimulation by an siRNA. Chembiochem. 2015-01-19 [PMID: 25487859] (Func, Human)

Umehara T, Tsujita N, Shimada M Activation of Toll-like receptor 7/8 encoded by the X chromosome alters sperm motility and provides a novel simple technology for sexing sperm PLoS Biol. 2019-08-01 [PMID: 31408454]

Johnson RH, kho DT, O' Carroll Sj et al. The functional and inflammatory response of brain endothelial cells to Toll-Like Receptor agonists. Sci Rep. 2018-07-04 [PMID: 29973684] (Func, Human)

Pietrzak-Nguyen A, Piradashvili K, Fichter M et al. MPLA-coated hepatitis B virus surface antigen (HBsAg) nanocapsules induce vigorous T cell responses in cord blood derived human T cells. Nanomedicine 2016-08-08 [PMID: 27516081]

Datta S, Barrera N, Pavicic PG et al. cEBP Homologous Protein Expression in Macrophages Regulates the Magnitude and Duration of IL-6 Expression and Dextran Sodium Sulfate Colitis J. Interferon Cytokine Res. 2015-07-02 [PMID: 26134251] (Func)

Valenzuela RA, Suter SR, Ball-Jones AA et al. Base Modification Strategies to Modulate Immune Stimulation by an siRNA. Chembiochem. 2014 Dec 08 [PMID: 25532693] (Human)

Details:  
human PBMCs





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