Product Datasheet

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

NBP2-26231-5mg

Unit Size: 5 mg

Store at -20 °C.

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Publications: 8

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Updated 10/23/2024 v.20.1

NBP2-26231-5mg

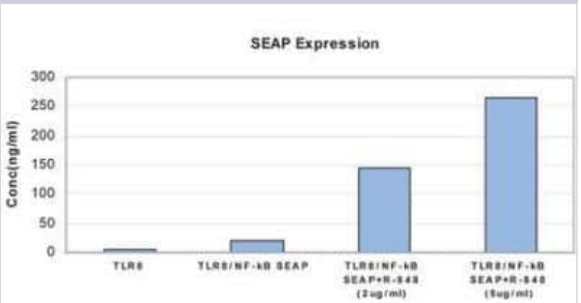
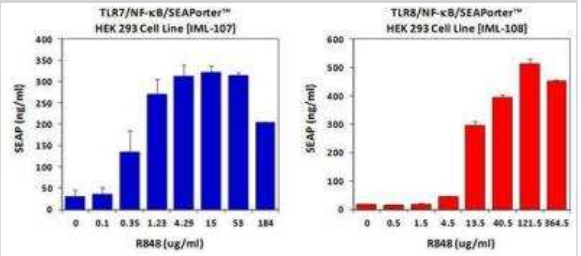
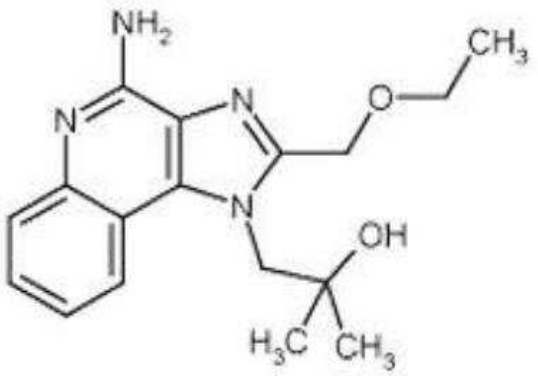
Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand

Product Information	
Unit Size	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-kB/SEAP plasmid using Lipofectamin 2000. After 48 hrs of transfection, 2 ug/mL or 5 ug/mL of R-848 was added. Cells were incubated at 37C for 24 hrs. Transfected cell supernatant was collected and analyzed using NF-kB SEAPorterAssay kit.	
Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand [NBP2-26231] - R-848 specifically activated the TLR7- or TLR8-depedent NF-kB/SEAP reporter cells in a dose dependent manner.	
Imidazoquinoline Resiquimod (R-848), TLR7 and TLR8 ligand [NBP2-26231] - Formula: C17H22N4O2	

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)

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