

## PyroMAT® System Monocyte Activation Test (MAT)

# NEP Control Resiquimod R848 - Ref. MATRESIQUIM0D

### Product description

Non-Endotoxin Pyrogen (NEP) Control Resiquimod R848 is an imidazoquinoline compound with potent anti-viral activity, supplied in a lyophilized form.

Resiquimod is used as a TLR ligand that activates **TLR7/TLR8** receptor of monocytes and can be used as a NEP positive control with the PyroMAT® system (Monocyte Activation Test for pyrogen detection). NEP control Resiquimod R848 is to be used for Product Specific Validation (PSV) and routine testing to show that the system is able to detect non-endotoxin pyrogen contaminants targeting TL7/TLR8.

### Storage condition

Store unopened vial at -20 °C.

Upon resuspension, prepare 50 µL aliquots and store for up to 12 months at -20 °C.

Do not use after expiration date of the product.

Avoid repeated freeze-thaw cycles.

### Quick Procedure

#### Resuspension:

- Reconstitute the NEP Control Resiquimod R848 with 1 mL of pyrogen-free water
- Vortex 1 minute or until complete homogenization
- Divide the obtained solution into 50 µL aliquots, into endotoxin-free microcentrifuge tubes

This reconstitution gives a 100X stock solution to be used for product specific validation and routine tests with PyroMAT® system.

After serial dilution in pyrogen-free water with 15 seconds of vortexing time between each dilution, the 1X solution of NEP Control Resiquimod R848 is used as a positive control with the PyroMAT® system.

**Warning: an extended time of vortex during the dilutions preparation can induce a decrease of response in MAT assay.**

### PyroMAT® system products

Product	Catalog number
PyroMAT® cells	PYROMATCELLS
PyroMAT® kit	PYR0MATKIT
Reference Standard Endotoxin	1.44161.0001
NEP Control Flagellin	MATFLAGELLIN
NEP Control HKSA	MATHKSA
NEP Control FSL-1	MATFSL1
NEP Control PAM3CSK4	MATPAM3CSK4
NEP Control Resiquimod	MATRESIQUIM0D

Merck KGaA  
Frankfurter Strasse 250  
64293 Darmstadt, Germany

**The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.**

© 2025 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. Merck, the vibrant M, Millipore and PyroMAT are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources. Lit. No. MK\_PF8535EN Ver. 4.0 10/2025

### To place an order or receive technical assistance

Order/Customer Service:  
[SigmaAldrich.com/order](https://SigmaAldrich.com/order)

Technical Service:  
[SigmaAldrich.com/techservice](https://SigmaAldrich.com/techservice)

[SigmaAldrich.com/PyroMAT](https://SigmaAldrich.com/PyroMAT)

