

## **Certificate of Analysis for NR-8191**

## Ferret Orthologue of Homo sapiens TLR4, Forward Primer

## Catalog No. NR-8191

This reagent is the tangible property of the U.S. Government.

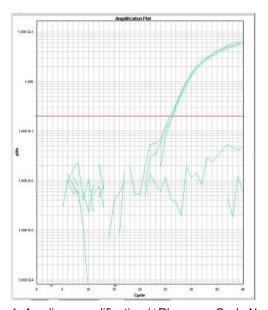
**Product Description:** NR-8191 pairs with NR-8192 to amplify the ferret (*Mustela putoris furo*) orthologue of *Homo sapiens* TLR4 (toll-like receptor 4), (NCBI GeneID: 7099).

Lot: 1117 Manufacturing Date: 14MAY2007

TEST	SPECIFICATIONS	RESULTS
PCR Amplification <sup>1</sup>		
Recommended primer concentration	Report results	500 nM
Observed C <sub>T</sub>	Report results	26.1 (see Figure 1)
Product T <sub>m</sub>	Report results	81.5°C (see Figure 2)
Amplification and Sequence Verification <sup>2</sup>	TLR4	TLR4
Content (OD <sub>260</sub> )	Report results	1.51
Content (µg)	Report results	44.24
Content (pmol)	Report results	7136.02
Volume Needed for 100 μM Solution (μL)	Report results	71.36
Purity by HPLC	> 75%	88.57% (see Figure 3)

<sup>&</sup>lt;sup>1</sup>Real-time PCR assay with a standard cDNA template derived from mitogen-activated ferret (*Mustela putoris furo*) PBMCs, splenocytes and lung tissue.

<sup>&</sup>lt;sup>2</sup>The PCR product of the target gene was cloned into pCR®2.1-TOPO®. Plasmid DNA was sequenced using the M13 reverse primer. Sequence identities were verified by BLASTN analysis against the NCBI database.



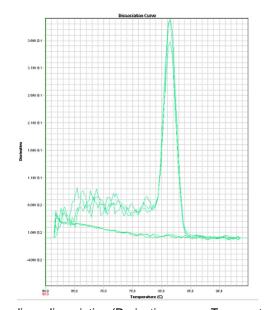


Figure 1. Amplicon amplification ( $\Delta Rh$  versus Cycle Number).

Figure 2. Amplicon dissociation (Derivative versus Temperature (°C)).

800-359-7370



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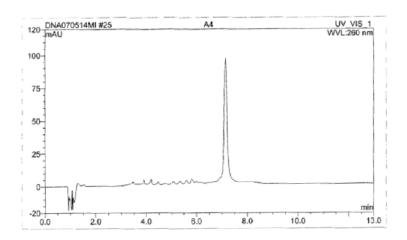


Figure 3. HPLC trace of purified oligonucleotide (Absorbance versus Elution Time).

**Date:** 31 JAN 2008 **Signature:** Signature on File

Title: Technical Manager, BEI Authentication or designee

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