

## **Certificate of Analysis for NR-8082**

## Ferret Orthologue of Homo sapiens Hsp40, Reverse Primer

## Catalog No. NR-8082

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

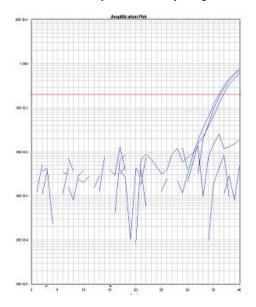
**Product Description:** NR-8082 pairs with NR-8081 to amplify the ferret (*Mustela putoris furo*) orthologue of *Homo sapiens* Hsp40 (DnaJ) subfamily B, member 1. Hsp40 is a molecular chaperone (NCBI GeneID: 3337).

Lot: 1008 Manufacturing Date: 14JUN2007

TEST	SPECIFICATIONS	RESULTS
PCR Amplification <sup>1</sup>		
Recommended primer concentration	Report results	300 nM
Observed C <sub>T</sub>	Report results	36.5 (see Figure 1)
Product T <sub>m</sub>	Report results	77°C (see Figure 2)
Amplification and Sequence Verification <sup>2</sup>	Hsp40	Hsp40
Content (OD <sub>260</sub> )	Report results	1.78
Content (µg)	Report results	56.36
Content (pmol)	Report results	9108.21
Volume Needed for 100 μM Solution (μL)	Report results	91.08
Purity by HPLC	> 75%	85.98% (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<sup>®</sup>2.1-TOPO<sup>®</sup>. Plasmid DNA was sequenced using the M13 reverse primer. Sequence identities were verified by BLASTN analysis against the NCBI database.



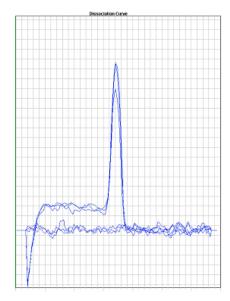


Figure 1. Amplicon amplification ( $\Delta Rh$  versus Cycle Number).

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

www.beiresources.org

Fax: 703-365-2898

E-mail: contact@beiresources.org

800-359-7370



## **Certificate of Analysis for NR-8082**

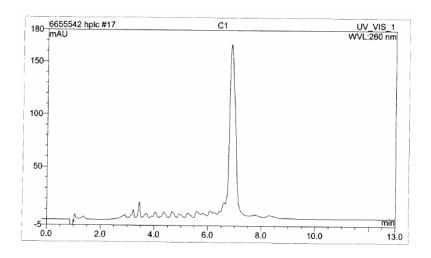


Figure 3. HPLC trace of purified oligonucleotide (Absorbance versus Elution Time).

**Date:** 18 DEC 2007 **Signature:** Signature on File

Title: Technical Manager, BEI Authentication or designee

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

Fax: 703-365-2898

E-mail: contact@beiresources.org

800-359-7370