**Product Information Sheet for NR-43389**

*Mycobacterium tuberculosis* subsp. *tuberculosis*, Strain H37Rv:pEXCF-1657, Transcription Factor Overexpression Mutant

**Catalog No. NR-43389**  
This reagent is the tangible property of the U.S. Government.

**Lot No. 62525164**

**Manufacturing Date: 27AUG2010**

**For research only. Not for human use.**

**Contributor and Manufacturer:**  
David Sherman, Professor, Seattle Biomedical Research Institute, Seattle, Washington, USA (NIAID/NIH Contract No. HHSN272200800059C)

**Product Description:**

**Bacteria Classification:** Mycobacteriaceae, *Mycobacterium*

**Species:** *Mycobacterium tuberculosis* subsp. *tuberculosis*

**Strain:** H37Rv:pEXCF-1657

**Gene:** Rv1657

**Original Source:** *Mycobacterium tuberculosis* (M. *tuberculosis*) subsp. *tuberculosis*, strain H37Rv was transformed with a C-terminally epitope-tagged expression vector containing Rv1657, a probable arginine repressor ArgR (AHRC).² ³

**Comment:** Fidelity of H37Rv:pEXCF-1657 was confirmed by sequencing prior to transformation into *M. tuberculosis*. Following transformation, transcription factor expression was assayed by induction with anhydrotetracycline (ATc). The microarray data obtained indicated that ATc led to 3.87 fold over-expression of Rv1657 (see Table 1 for complete microarray data).

pEXCF-1657 is an ATc inducible episomal vector containing a Gateway® recombinant (Invitrogen™) cassette modified to contain an in-frame C-terminal FLAG epitope tag (see Figure 1 for plasmid map and Table 2 for primer sequences). Rv1657 was selected from a Gateway® entry clone library, or was sub-cloned from the H37Rv genome using gene-specific oligonucleotides containing Gateway® recombination sequences at the 5' ends, and recombined into this vector to create a C-terminally epitope-tagged expression vector (plasmid ExPression C-terminal Flag Tag: pEXCF).

Further details relating to applications and the construction of the entire TFOE mutant collection can be found in Nature 499 (2013): 178-183. PubMed: 23823726. Primers recommended for confirmatory sequencing are provided in Table 2.

*M. tuberculosis*, strain H37Rv, was acquired from the Colorado State University TB Vaccine Testing and Research Materials Contract and was sequenced by the Broad Institute (GenBank: CP003248).

**Material Provided:**

Each vial contains approximately 0.25 mL of bacterial culture in Middlebrook 7H9 liquid medium containing 50 µg/mL hygromycin, 0.2% glycerol, 0.05% Tween80, 0.5% BSA, 0.2% dextrose and 0.085% sodium chloride.

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

NR-43389 was packaged aseptically in plastic 0.5 mL cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Media:**

Middlebrook 7H9 broth with the ADC supplement, 0.05% Tween80 and 50 µg/mL hygromycin B

Middlebrook 7H10 agar with OADC enrichment and 50 µg/mL hygromycin B or Middlebrook 7H11 agar with OADC enrichment and 50 µg/mL hygromycin B (incorporation of Tween80 in agar is optional)

**Incubation:**

Temperature: 37°C

Atmosphere: Aerobic with or without 5% CO₂ (some strains may show enhanced growth in the presence of 5% CO₂)

**Propagation:**

1. Keep vial frozen until ready for use; then thaw.
2. Pipet the vial contents onto an agar plate. Use an aerosol resistant tip to transfer cells from the liquid culture to the plate.
3. Streak the bacteria to grow as a lawn. Place inoculated plates in a sealable bag and place in warm room.
4. Incubate plates at 37°C for 2 to 4 weeks.
5. Once cells have grown, move plates into biosafety cabinet and use a sterile cell scraper to aseptically scrape the cells into the recommended liquid media for use with the transcription factor induction protocol (see supplementary information).

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Mycobacterium tuberculosis subsp. tuberculosis, Strain H37Rv:pEXCF-1657, Transcription Factor Overexpression Mutant, NR-43389.”

**Biosafety Level: 3**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services,

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

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:
1. TubercuList: Rv1657

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

Table 1: Transcription Factor Overexpression Mutant Microarray Data

<table>
<thead>
<tr>
<th>NR Number</th>
<th>Strain Description</th>
<th>Rv Number</th>
<th>Basal level of Transcription Factor Expression²,³</th>
<th>Induced Level of Transcription Factor Expression²,⁴</th>
<th>Fold Change⁵,⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-43288</td>
<td>H37Rv:pEXCF-0019c</td>
<td>Rv0019c</td>
<td>13.24</td>
<td>14.42</td>
<td>1.18</td>
</tr>
<tr>
<td>NR-43289</td>
<td>H37Rv:pEXCF-0020c</td>
<td>Rv0020c</td>
<td>13.85</td>
<td>14.55</td>
<td>0.70</td>
</tr>
<tr>
<td>NR-43290</td>
<td>H37Rv:pEXCF-0022c</td>
<td>Rv0022c</td>
<td>7.56</td>
<td>14.42</td>
<td>6.86</td>
</tr>
<tr>
<td>NR-43291</td>
<td>H37Rv:pEXCF-0023</td>
<td>Rv0023</td>
<td>10.70</td>
<td>14.86</td>
<td>4.16</td>
</tr>
<tr>
<td>NR-43292</td>
<td>H37Rv:pEXCF-0038</td>
<td>Rv0038</td>
<td>13.15</td>
<td>14.37</td>
<td>1.22</td>
</tr>
<tr>
<td>NR-43293</td>
<td>H37Rv:pEXCF-0042c</td>
<td>Rv0042c</td>
<td>13.20</td>
<td>14.61</td>
<td>1.41</td>
</tr>
<tr>
<td>NR-43294</td>
<td>H37Rv:pEXCF-0043c</td>
<td>Rv0043c</td>
<td>12.03</td>
<td>14.77</td>
<td>2.74</td>
</tr>
<tr>
<td>NR-43295</td>
<td>H37Rv:pEXCF-0047c</td>
<td>Rv0047c</td>
<td>12.41</td>
<td>14.97</td>
<td>2.56</td>
</tr>
<tr>
<td>NR-43296</td>
<td>H37Rv:pEXCF-0054</td>
<td>Rv0054</td>
<td>14.05</td>
<td>14.75</td>
<td>0.70</td>
</tr>
<tr>
<td>NR-43297</td>
<td>H37Rv:pEXCF-0067c</td>
<td>Rv0067c</td>
<td>9.91</td>
<td>13.96</td>
<td>4.05</td>
</tr>
<tr>
<td>NR-43298</td>
<td>H37Rv:pEXCF-0078</td>
<td>Rv0078</td>
<td>10.01</td>
<td>13.53</td>
<td>3.52</td>
</tr>
<tr>
<td>NR-43299</td>
<td>H37Rv:pEXCF-0081</td>
<td>Rv0081</td>
<td>12.28</td>
<td>15.22</td>
<td>2.94</td>
</tr>
<tr>
<td>NR-43300</td>
<td>H37Rv:pEXCF-0117</td>
<td>Rv0117</td>
<td>10.07</td>
<td>14.76</td>
<td>4.69</td>
</tr>
<tr>
<td>NR-43301</td>
<td>H37Rv:pEXCF-0135c</td>
<td>Rv0135c</td>
<td>12.41</td>
<td>14.70</td>
<td>2.30</td>
</tr>
<tr>
<td>NR-43302</td>
<td>H37Rv:pEXCF-0144</td>
<td>Rv0144</td>
<td>13.87</td>
<td>14.70</td>
<td>0.83</td>
</tr>
</tbody>
</table>
## Product Information Sheet for NR-43389

<table>
<thead>
<tr>
<th>NR Number</th>
<th>Strain Description</th>
<th>Rv Number</th>
<th>Basal level of Transcription Factor Expression&lt;sup&gt;3,3&lt;/sup&gt;</th>
<th>Induced Level of Transcription Factor Expression&lt;sup&gt;2,4&lt;/sup&gt;</th>
<th>Fold Change&lt;sup&gt;5,6&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-43303</td>
<td>H37Rv:pEXCF-0158</td>
<td>Rv0158</td>
<td>11.42</td>
<td>14.40</td>
<td>2.98</td>
</tr>
<tr>
<td>NR-43304</td>
<td>H37Rv:pEXCF-0165c</td>
<td>Rv0165c</td>
<td>11.82</td>
<td>15.53</td>
<td>3.72</td>
</tr>
<tr>
<td>NR-43305</td>
<td>H37Rv:pEXCF-0182c</td>
<td>Rv0182c</td>
<td>12.14</td>
<td>14.51</td>
<td>2.37</td>
</tr>
<tr>
<td>NR-43306</td>
<td>H37Rv:pEXCF-0195</td>
<td>Rv0195</td>
<td>7.55</td>
<td>13.61</td>
<td>6.05</td>
</tr>
<tr>
<td>NR-43307</td>
<td>H37Rv:pEXCF-0212c</td>
<td>Rv0212c</td>
<td>10.27</td>
<td>14.79</td>
<td>4.52</td>
</tr>
<tr>
<td>NR-43308</td>
<td>H37Rv:pEXCF-0232</td>
<td>Rv0232</td>
<td>12.81</td>
<td>15.03</td>
<td>2.22</td>
</tr>
<tr>
<td>NR-43309</td>
<td>H37Rv:pEXCF-0238</td>
<td>Rv0238</td>
<td>12.49</td>
<td>14.33</td>
<td>1.84</td>
</tr>
<tr>
<td>NR-43310</td>
<td>H37Rv:pEXCF-0260c</td>
<td>Rv0260c</td>
<td>7.31</td>
<td>13.37</td>
<td>6.07</td>
</tr>
<tr>
<td>NR-43311</td>
<td>H37Rv:pEXCF-0273c</td>
<td>Rv0273c</td>
<td>11.06</td>
<td>14.31</td>
<td>3.26</td>
</tr>
<tr>
<td>NR-43312</td>
<td>H37Rv:pEXCF-0275c</td>
<td>Rv0275c</td>
<td>11.93</td>
<td>14.27</td>
<td>2.33</td>
</tr>
<tr>
<td>NR-43313</td>
<td>H37Rv:pEXCF-0302</td>
<td>Rv0302</td>
<td>12.65</td>
<td>14.42</td>
<td>1.78</td>
</tr>
<tr>
<td>NR-43314</td>
<td>H37Rv:pEXCF-0324</td>
<td>Rv0324</td>
<td>9.98</td>
<td>14.68</td>
<td>4.70</td>
</tr>
<tr>
<td>NR-43316</td>
<td>H37Rv:pEXCF-0330c</td>
<td>Rv0330c</td>
<td>9.08</td>
<td>14.49</td>
<td>5.41</td>
</tr>
<tr>
<td>NR-43317</td>
<td>H37Rv:pEXCF-0339c</td>
<td>Rv0339c</td>
<td>10.30</td>
<td>14.07</td>
<td>3.77</td>
</tr>
<tr>
<td>NR-43318</td>
<td>H37Rv:pEXCF-0348</td>
<td>Rv0348</td>
<td>9.83</td>
<td>13.68</td>
<td>3.85</td>
</tr>
<tr>
<td>NR-43319</td>
<td>H37Rv:pEXCF-0353</td>
<td>Rv0353</td>
<td>13.79</td>
<td>14.80</td>
<td>1.01</td>
</tr>
<tr>
<td>NR-43320</td>
<td>H37Rv:pEXCF-0377</td>
<td>Rv0377</td>
<td>10.02</td>
<td>14.11</td>
<td>4.10</td>
</tr>
<tr>
<td>NR-43321</td>
<td>H37Rv:pEXCF-0445c</td>
<td>Rv0445c</td>
<td>13.01</td>
<td>14.87</td>
<td>1.86</td>
</tr>
<tr>
<td>NR-43322</td>
<td>H37Rv:pEXCF-0452</td>
<td>Rv0452</td>
<td>11.18</td>
<td>14.96</td>
<td>3.78</td>
</tr>
<tr>
<td>NR-43323</td>
<td>H37Rv:pEXCF-0465c</td>
<td>Rv0465c</td>
<td>10.55</td>
<td>14.19</td>
<td>3.63</td>
</tr>
<tr>
<td>NR-43324</td>
<td>H37Rv:pEXCF-0472c</td>
<td>Rv0472c</td>
<td>13.10</td>
<td>14.93</td>
<td>1.82</td>
</tr>
<tr>
<td>NR-43325</td>
<td>H37Rv:pEXCF-0474</td>
<td>Rv0474</td>
<td>12.74</td>
<td>14.91</td>
<td>2.16</td>
</tr>
<tr>
<td>NR-43327</td>
<td>H37Rv:pEXCF-0491</td>
<td>Rv0491</td>
<td>13.58</td>
<td>14.47</td>
<td>0.88</td>
</tr>
<tr>
<td>NR-43328</td>
<td>H37Rv:pEXCF-0494</td>
<td>Rv0494</td>
<td>8.60</td>
<td>14.28</td>
<td>5.68</td>
</tr>
<tr>
<td>NR-43329</td>
<td>H37Rv:pEXCF-0576</td>
<td>Rv0576</td>
<td>12.03</td>
<td>14.98</td>
<td>2.95</td>
</tr>
<tr>
<td>NR-43330</td>
<td>H37Rv:pEXCF-0586</td>
<td>Rv0586</td>
<td>12.67</td>
<td>14.67</td>
<td>2.00</td>
</tr>
<tr>
<td>NR-43331</td>
<td>H37Rv:pEXCF-0599c</td>
<td>Rv0599c</td>
<td>13.25</td>
<td>14.85</td>
<td>1.59</td>
</tr>
<tr>
<td>NR-43332</td>
<td>H37Rv:pEXCF-0602c</td>
<td>Rv0602c</td>
<td>7.77</td>
<td>14.75</td>
<td>6.99</td>
</tr>
<tr>
<td>NR-43333</td>
<td>H37Rv:pEXCF-0608</td>
<td>Rv0608</td>
<td>13.63</td>
<td>14.97</td>
<td>1.35</td>
</tr>
<tr>
<td>NR-43334</td>
<td>H37Rv:pEXCF-0623</td>
<td>Rv0623</td>
<td>12.69</td>
<td>15.08</td>
<td>2.39</td>
</tr>
<tr>
<td>NR-43335</td>
<td>H37Rv:pEXCF-0653c</td>
<td>Rv0653c</td>
<td>9.61</td>
<td>14.01</td>
<td>4.40</td>
</tr>
<tr>
<td>NR-43336</td>
<td>H37Rv:pEXCF-0674</td>
<td>Rv0674</td>
<td>11.20</td>
<td>14.70</td>
<td>3.50</td>
</tr>
<tr>
<td>NR-43338</td>
<td>H37Rv:pEXCF-0681</td>
<td>Rv0681</td>
<td>13.29</td>
<td>14.43</td>
<td>1.13</td>
</tr>
<tr>
<td>NR-43339</td>
<td>H37Rv:pEXCF-0691c</td>
<td>Rv0691c</td>
<td>8.33</td>
<td>14.75</td>
<td>6.42</td>
</tr>
<tr>
<td>NR-43340</td>
<td>H37Rv:pEXCF-0735</td>
<td>Rv0735</td>
<td>10.13</td>
<td>14.94</td>
<td>4.81</td>
</tr>
<tr>
<td>NR-43341</td>
<td>H37Rv:pEXCF-0737</td>
<td>Rv0737</td>
<td>9.87</td>
<td>14.74</td>
<td>4.87</td>
</tr>
</tbody>
</table>
### Product Information Sheet for NR-43389

<table>
<thead>
<tr>
<th>NR Number</th>
<th>Strain Description</th>
<th>Rv Number</th>
<th>Basal level of Transcription Factor Expression&lt;sup&gt;3,3&lt;/sup&gt;</th>
<th>Induced Level of Transcription Factor Expression&lt;sup&gt;2,4&lt;/sup&gt;</th>
<th>Fold Change&lt;sup&gt;5,6&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-43342</td>
<td>H37Rv:pEXCF-0744c</td>
<td>Rv0744c</td>
<td>11.82</td>
<td>15.07</td>
<td>3.25</td>
</tr>
<tr>
<td>NR-43344</td>
<td>H37Rv:pEXCF-0757</td>
<td>Rv0757</td>
<td>13.30</td>
<td>14.68</td>
<td>1.38</td>
</tr>
<tr>
<td>NR-43345</td>
<td>H37Rv:pEXCF-0767c</td>
<td>Rv0767c</td>
<td>8.76</td>
<td>14.54</td>
<td>5.78</td>
</tr>
<tr>
<td>NR-43346</td>
<td>H37Rv:pEXCF-0792c</td>
<td>Rv0792c</td>
<td>10.51</td>
<td>14.52</td>
<td>4.01</td>
</tr>
<tr>
<td>NR-43347</td>
<td>H37Rv:pEXCF-0818</td>
<td>Rv0818</td>
<td>13.42</td>
<td>14.75</td>
<td>1.33</td>
</tr>
<tr>
<td>NR-43348</td>
<td>H37Rv:pEXCF-0821c</td>
<td>Rv0821c</td>
<td>13.70</td>
<td>14.77</td>
<td>1.07</td>
</tr>
<tr>
<td>NR-43349</td>
<td>H37Rv:pEXCF-0823c</td>
<td>Rv0823c</td>
<td>13.99</td>
<td>14.85</td>
<td>0.86</td>
</tr>
<tr>
<td>NR-43350</td>
<td>H37Rv:pEXCF-0827c</td>
<td>Rv0827c</td>
<td>9.56</td>
<td>14.86</td>
<td>5.30</td>
</tr>
<tr>
<td>NR-43351</td>
<td>H37Rv:pEXCF-0844c</td>
<td>Rv0844c</td>
<td>12.83</td>
<td>14.60</td>
<td>1.77</td>
</tr>
<tr>
<td>NR-43352</td>
<td>H37Rv:pEXCF-0880</td>
<td>Rv0880</td>
<td>12.15</td>
<td>14.82</td>
<td>2.67</td>
</tr>
<tr>
<td>NR-43353</td>
<td>H37Rv:pEXCF-0891c</td>
<td>Rv0891c</td>
<td>12.05</td>
<td>14.61</td>
<td>2.56</td>
</tr>
<tr>
<td>NR-43354</td>
<td>H37Rv:pEXCF-0894</td>
<td>Rv0894</td>
<td>8.23</td>
<td>14.71</td>
<td>6.48</td>
</tr>
<tr>
<td>NR-43355</td>
<td>H37Rv:pEXCF-0903c</td>
<td>Rv0903c</td>
<td>13.27</td>
<td>14.28</td>
<td>1.01</td>
</tr>
<tr>
<td>NR-43356</td>
<td>H37Rv:pEXCF-0967</td>
<td>Rv0967</td>
<td>12.22</td>
<td>14.99</td>
<td>2.78</td>
</tr>
<tr>
<td>NR-43357</td>
<td>H37Rv:pEXCF-0981</td>
<td>Rv0981</td>
<td>12.79</td>
<td>14.55</td>
<td>1.76</td>
</tr>
<tr>
<td>NR-43358</td>
<td>H37Rv:pEXCF-1019</td>
<td>Rv1019</td>
<td>12.41</td>
<td>14.63</td>
<td>2.22</td>
</tr>
<tr>
<td>NR-43359</td>
<td>H37Rv:pEXCF-1027c</td>
<td>Rv1027c</td>
<td>9.62</td>
<td>14.44</td>
<td>4.82</td>
</tr>
<tr>
<td>NR-43360</td>
<td>H37Rv:pEXCF-1033c</td>
<td>Rv1033c</td>
<td>10.49</td>
<td>14.54</td>
<td>4.05</td>
</tr>
<tr>
<td>NR-43361</td>
<td>H37Rv:pEXCF-1049</td>
<td>Rv1049</td>
<td>10.83</td>
<td>15.43</td>
<td>4.59</td>
</tr>
<tr>
<td>NR-43362</td>
<td>H37Rv:pEXCF-1129c</td>
<td>Rv1129c</td>
<td>8.72</td>
<td>14.25</td>
<td>5.53</td>
</tr>
<tr>
<td>NR-43363</td>
<td>H37Rv:pEXCF-1151c</td>
<td>Rv1151c</td>
<td>11.17</td>
<td>14.43</td>
<td>3.25</td>
</tr>
<tr>
<td>NR-43364</td>
<td>H37Rv:pEXCF-1152</td>
<td>Rv1152</td>
<td>11.93</td>
<td>14.86</td>
<td>2.93</td>
</tr>
<tr>
<td>NR-43365</td>
<td>H37Rv:pEXCF-1167c</td>
<td>Rv1167c</td>
<td>12.52</td>
<td>15.07</td>
<td>2.55</td>
</tr>
<tr>
<td>NR-43366</td>
<td>H37Rv:pEXCF-1176c</td>
<td>Rv1176c</td>
<td>10.68</td>
<td>14.52</td>
<td>3.84</td>
</tr>
<tr>
<td>NR-43367</td>
<td>H37Rv:pEXCF-1186c</td>
<td>Rv1186c</td>
<td>10.86</td>
<td>14.58</td>
<td>3.72</td>
</tr>
<tr>
<td>NR-43368</td>
<td>H37Rv:pEXCF-1189</td>
<td>Rv1189</td>
<td>8.41</td>
<td>14.12</td>
<td>5.71</td>
</tr>
<tr>
<td>NR-43369</td>
<td>H37Rv:pEXCF-1219c</td>
<td>Rv1219c</td>
<td>10.02</td>
<td>15.09</td>
<td>5.07</td>
</tr>
<tr>
<td>NR-43370</td>
<td>H37Rv:pEXCF-1221</td>
<td>Rv1221</td>
<td>13.79</td>
<td>14.78</td>
<td>0.99</td>
</tr>
<tr>
<td>NR-43371</td>
<td>H37Rv:pEXCF-1255c</td>
<td>Rv1255c</td>
<td>9.81</td>
<td>14.49</td>
<td>4.68</td>
</tr>
<tr>
<td>NR-43372</td>
<td>H37Rv:pEXCF-1267c</td>
<td>Rv1267c</td>
<td>9.07</td>
<td>14.82</td>
<td>5.75</td>
</tr>
<tr>
<td>NR-43373</td>
<td>H37Rv:pEXCF-1287</td>
<td>Rv1287</td>
<td>11.94</td>
<td>15.03</td>
<td>3.09</td>
</tr>
<tr>
<td>NR-43374</td>
<td>H37Rv:pEXCF-1332</td>
<td>Rv1332</td>
<td>13.36</td>
<td>14.68</td>
<td>1.32</td>
</tr>
<tr>
<td>NR-43375</td>
<td>H37Rv:pEXCF-1353c</td>
<td>Rv1353c</td>
<td>8.53</td>
<td>13.11</td>
<td>4.59</td>
</tr>
<tr>
<td>NR-43376</td>
<td>H37Rv:pEXCF-1358</td>
<td>Rv1358</td>
<td>7.47</td>
<td>13.17</td>
<td>5.71</td>
</tr>
<tr>
<td>NR-43377</td>
<td>H37Rv:pEXCF-1359</td>
<td>Rv1359</td>
<td>8.73</td>
<td>14.81</td>
<td>6.09</td>
</tr>
<tr>
<td>NR-43378</td>
<td>H37Rv:pEXCF-1379</td>
<td>Rv1379</td>
<td>12.87</td>
<td>15.06</td>
<td>2.19</td>
</tr>
<tr>
<td>NR-43379</td>
<td>H37Rv:pEXCF-1395</td>
<td>Rv1395</td>
<td>8.96</td>
<td>14.55</td>
<td>5.59</td>
</tr>
<tr>
<td>NR-43380</td>
<td>H37Rv:pEXCF-1404</td>
<td>Rv1404</td>
<td>13.35</td>
<td>14.77</td>
<td>1.41</td>
</tr>
<tr>
<td>NR-43381</td>
<td>H37Rv:pEXCF-1423</td>
<td>Rv1423</td>
<td>13.08</td>
<td>14.45</td>
<td>1.37</td>
</tr>
</tbody>
</table>
## Product Information Sheet for NR-43389

<table>
<thead>
<tr>
<th>NR Number</th>
<th>Strain Description</th>
<th>Rv Number</th>
<th>Basal level of Transcription Factor Expression[^{2,3}]</th>
<th>Induced Level of Transcription Factor Expression[^{2,4}]</th>
<th>Fold Change[^{5,6}]</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-43382</td>
<td>H37Rv:pEXCF-1453</td>
<td>Rv1453</td>
<td>8.84</td>
<td>14.04</td>
<td>5.19</td>
</tr>
<tr>
<td>NR-43383</td>
<td>H37Rv:pEXCF-1460</td>
<td>Rv1460</td>
<td>11.78</td>
<td>14.76</td>
<td>2.98</td>
</tr>
<tr>
<td>NR-43384</td>
<td>H37Rv:pEXCF-1473A</td>
<td>Rv1473A</td>
<td>11.29</td>
<td>14.19</td>
<td>2.89</td>
</tr>
<tr>
<td>NR-43385</td>
<td>H37Rv:pEXCF-1474c</td>
<td>Rv1474c</td>
<td>12.63</td>
<td>14.77</td>
<td>2.14</td>
</tr>
<tr>
<td>NR-43386</td>
<td>H37Rv:pEXCF-1556</td>
<td>Rv1556</td>
<td>11.01</td>
<td>14.05</td>
<td>3.04</td>
</tr>
<tr>
<td>NR-43387</td>
<td>H37Rv:pEXCF-1560</td>
<td>Rv1560</td>
<td>12.55</td>
<td>14.62</td>
<td>2.07</td>
</tr>
<tr>
<td>NR-43388</td>
<td>H37Rv:pEXCF-1626</td>
<td>Rv1626</td>
<td>14.23</td>
<td>14.27</td>
<td>0.04</td>
</tr>
<tr>
<td>NR-43389</td>
<td>H37Rv:pEXCF-1657</td>
<td>Rv1657</td>
<td>10.38</td>
<td>14.26</td>
<td>3.87</td>
</tr>
<tr>
<td>NR-43390</td>
<td>H37Rv:pEXCF-1674c</td>
<td>Rv1674c</td>
<td>7.62</td>
<td>13.35</td>
<td>5.73</td>
</tr>
<tr>
<td>NR-43391</td>
<td>H37Rv:pEXCF-1675c</td>
<td>Rv1675c</td>
<td>7.86</td>
<td>13.63</td>
<td>5.77</td>
</tr>
<tr>
<td>NR-43393</td>
<td>H37Rv:pEXCF-1725c</td>
<td>Rv1725c</td>
<td>9.02</td>
<td>14.55</td>
<td>5.53</td>
</tr>
<tr>
<td>NR-43394</td>
<td>H37Rv:pEXCF-1740</td>
<td>Rv1740</td>
<td>11.42</td>
<td>14.79</td>
<td>3.37</td>
</tr>
<tr>
<td>NR-43395</td>
<td>H37Rv:pEXCF-1773c</td>
<td>Rv1773c</td>
<td>9.15</td>
<td>14.32</td>
<td>5.18</td>
</tr>
<tr>
<td>NR-43396</td>
<td>H37Rv:pEXCF-1776c</td>
<td>Rv1776c</td>
<td>8.57</td>
<td>13.77</td>
<td>5.19</td>
</tr>
<tr>
<td>NR-43397</td>
<td>H37Rv:pEXCF-1816</td>
<td>Rv1816</td>
<td>13.08</td>
<td>14.92</td>
<td>1.84</td>
</tr>
<tr>
<td>NR-43398</td>
<td>H37Rv:pEXCF-1828</td>
<td>Rv1828</td>
<td>13.92</td>
<td>14.48</td>
<td>0.56</td>
</tr>
<tr>
<td>NR-43399</td>
<td>H37Rv:pEXCF-1830</td>
<td>Rv1830</td>
<td>14.02</td>
<td>14.15</td>
<td>0.13</td>
</tr>
<tr>
<td>NR-43400</td>
<td>H37Rv:pEXCF-1846c</td>
<td>Rv1846c</td>
<td>14.12</td>
<td>14.33</td>
<td>0.21</td>
</tr>
<tr>
<td>NR-43401</td>
<td>H37Rv:pEXCF-1909c</td>
<td>Rv1909c</td>
<td>11.70</td>
<td>15.03</td>
<td>3.32</td>
</tr>
<tr>
<td>NR-43402</td>
<td>H37Rv:pEXCF-1931c</td>
<td>Rv1931c</td>
<td>8.23</td>
<td>13.28</td>
<td>5.05</td>
</tr>
<tr>
<td>NR-43404</td>
<td>H37Rv:pEXCF-1960c</td>
<td>Rv1960c</td>
<td>11.57</td>
<td>14.52</td>
<td>2.95</td>
</tr>
<tr>
<td>NR-43406</td>
<td>H37Rv:pEXCF-1985c</td>
<td>Rv1985c</td>
<td>9.56</td>
<td>14.64</td>
<td>5.07</td>
</tr>
<tr>
<td>NR-43407</td>
<td>H37Rv:pEXCF-1990c</td>
<td>Rv1990c</td>
<td>11.28</td>
<td>14.18</td>
<td>2.90</td>
</tr>
<tr>
<td>NR-43408</td>
<td>H37Rv:pEXCF-1994c</td>
<td>Rv1994c</td>
<td>12.02</td>
<td>14.45</td>
<td>2.43</td>
</tr>
<tr>
<td>NR-43409</td>
<td>H37Rv:pEXCF-2009</td>
<td>Rv2009</td>
<td>13.97</td>
<td>14.50</td>
<td>0.53</td>
</tr>
<tr>
<td>NR-43410</td>
<td>H37Rv:pEXCF-2011c</td>
<td>Rv2011c</td>
<td>9.12</td>
<td>13.84</td>
<td>4.72</td>
</tr>
<tr>
<td>NR-43411</td>
<td>H37Rv:pEXCF-2017</td>
<td>Rv2017</td>
<td>10.89</td>
<td>14.00</td>
<td>3.10</td>
</tr>
<tr>
<td>NR-43412</td>
<td>H37Rv:pEXCF-2021c</td>
<td>Rv2021c</td>
<td>12.21</td>
<td>14.56</td>
<td>2.35</td>
</tr>
<tr>
<td>NR-43413</td>
<td>H37Rv:pEXCF-2034</td>
<td>Rv2034</td>
<td>10.76</td>
<td>14.63</td>
<td>3.86</td>
</tr>
<tr>
<td>NR-43414</td>
<td>H37Rv:pEXCF-2069</td>
<td>Rv2069</td>
<td>13.32</td>
<td>14.65</td>
<td>1.33</td>
</tr>
<tr>
<td>NR-43415</td>
<td>H37Rv:pEXCF-2160A</td>
<td>Rv2160A</td>
<td>13.35</td>
<td>14.96</td>
<td>1.61</td>
</tr>
<tr>
<td>NR-43416</td>
<td>H37Rv:pEXCF-2160c</td>
<td>Rv2160c</td>
<td>12.98</td>
<td>14.77</td>
<td>1.79</td>
</tr>
<tr>
<td>NR-43417</td>
<td>H37Rv:pEXCF-2175c</td>
<td>Rv2175c</td>
<td>11.50</td>
<td>14.80</td>
<td>3.30</td>
</tr>
<tr>
<td>NR-43418</td>
<td>H37Rv:pEXCF-2242</td>
<td>Rv2242</td>
<td>11.54</td>
<td>14.49</td>
<td>2.95</td>
</tr>
<tr>
<td>NR-43419</td>
<td>H37Rv:pEXCF-2250c</td>
<td>Rv2250c</td>
<td>8.56</td>
<td>14.22</td>
<td>5.65</td>
</tr>
<tr>
<td>NR-43420</td>
<td>H37Rv:pEXCF-2258c</td>
<td>Rv2258c</td>
<td>13.46</td>
<td>14.54</td>
<td>1.09</td>
</tr>
</tbody>
</table>
## Product Information Sheet for NR-43389

<table>
<thead>
<tr>
<th>NR Number</th>
<th>Strain Description</th>
<th>Rv Number</th>
<th>Basal level of Transcription Factor Expression</th>
<th>Induced Level of Transcription Factor Expression</th>
<th>Fold Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-43421</td>
<td>H37Rv:pEXCF-2282c</td>
<td>Rv2282c</td>
<td>8.83</td>
<td>13.97</td>
<td>5.15</td>
</tr>
<tr>
<td>NR-43422</td>
<td>H37Rv:pEXCF-2324</td>
<td>Rv2324</td>
<td>9.82</td>
<td>14.58</td>
<td>4.76</td>
</tr>
<tr>
<td>NR-43423</td>
<td>H37Rv:pEXCF-2359</td>
<td>Rv2359</td>
<td>12.01</td>
<td>14.93</td>
<td>2.92</td>
</tr>
<tr>
<td>NR-43424</td>
<td>H37Rv:pEXCF-2374c</td>
<td>Rv2374c</td>
<td>13.08</td>
<td>15.11</td>
<td>2.04</td>
</tr>
<tr>
<td>NR-43425</td>
<td>H37Rv:pEXCF-2478c</td>
<td>Rv2478c</td>
<td>10.95</td>
<td>14.26</td>
<td>3.31</td>
</tr>
<tr>
<td>NR-43426</td>
<td>H37Rv:pEXCF-2488c</td>
<td>Rv2488c</td>
<td>8.79</td>
<td>13.61</td>
<td>4.82</td>
</tr>
<tr>
<td>NR-43427</td>
<td>H37Rv:pEXCF-2506</td>
<td>Rv2506</td>
<td>10.44</td>
<td>14.25</td>
<td>3.82</td>
</tr>
<tr>
<td>NR-43428</td>
<td>H37Rv:pEXCF-2595</td>
<td>Rv2595</td>
<td>13.03</td>
<td>14.72</td>
<td>1.16</td>
</tr>
<tr>
<td>NR-43429</td>
<td>H37Rv:pEXCF-2621c</td>
<td>Rv2621c</td>
<td>11.35</td>
<td>14.56</td>
<td>3.20</td>
</tr>
<tr>
<td>NR-43430</td>
<td>H37Rv:pEXCF-2640c</td>
<td>Rv2640c</td>
<td>12.09</td>
<td>12.82</td>
<td>0.73</td>
</tr>
<tr>
<td>NR-43431</td>
<td>H37Rv:pEXCF-2642</td>
<td>Rv2642</td>
<td>10.90</td>
<td>14.81</td>
<td>3.90</td>
</tr>
<tr>
<td>NR-43432</td>
<td>H37Rv:pEXCF-2703</td>
<td>Rv2703</td>
<td>14.20</td>
<td>15.14</td>
<td>0.94</td>
</tr>
<tr>
<td>NR-43433</td>
<td>H37Rv:pEXCF-2710</td>
<td>Rv2710</td>
<td>14.12</td>
<td>14.80</td>
<td>0.68</td>
</tr>
<tr>
<td>NR-43434</td>
<td>H37Rv:pEXCF-2711</td>
<td>Rv2711</td>
<td>13.77</td>
<td>14.96</td>
<td>1.20</td>
</tr>
<tr>
<td>NR-43435</td>
<td>H37Rv:pEXCF-2720</td>
<td>Rv2720</td>
<td>13.53</td>
<td>14.69</td>
<td>1.16</td>
</tr>
<tr>
<td>NR-43436</td>
<td>H37Rv:pEXCF-2745c</td>
<td>Rv2745c</td>
<td>14.36</td>
<td>15.25</td>
<td>0.90</td>
</tr>
<tr>
<td>NR-43437</td>
<td>H37Rv:pEXCF-2760c</td>
<td>Rv2760c</td>
<td>10.48</td>
<td>14.88</td>
<td>4.41</td>
</tr>
<tr>
<td>NR-43438</td>
<td>H37Rv:pEXCF-2779c</td>
<td>Rv2779c</td>
<td>10.94</td>
<td>14.69</td>
<td>3.74</td>
</tr>
<tr>
<td>NR-43439</td>
<td>H37Rv:pEXCF-2788</td>
<td>Rv2788</td>
<td>11.85</td>
<td>14.44</td>
<td>2.59</td>
</tr>
<tr>
<td>NR-43440</td>
<td>H37Rv:pEXCF-2827c</td>
<td>Rv2827c</td>
<td>11.06</td>
<td>14.74</td>
<td>3.68</td>
</tr>
<tr>
<td>NR-43441</td>
<td>H37Rv:pEXCF-2884</td>
<td>Rv2884</td>
<td>10.47</td>
<td>14.54</td>
<td>4.07</td>
</tr>
<tr>
<td>NR-43442</td>
<td>H37Rv:pEXCF-2887</td>
<td>Rv2887</td>
<td>11.88</td>
<td>14.69</td>
<td>2.81</td>
</tr>
<tr>
<td>NR-43443</td>
<td>H37Rv:pEXCF-2912c</td>
<td>Rv2912c</td>
<td>10.84</td>
<td>14.14</td>
<td>3.30</td>
</tr>
<tr>
<td>NR-43444</td>
<td>H37Rv:pEXCF-2986c</td>
<td>Rv2986c</td>
<td>14.58</td>
<td>15.15</td>
<td>0.57</td>
</tr>
<tr>
<td>NR-43445</td>
<td>H37Rv:pEXCF-2989</td>
<td>Rv2989</td>
<td>13.18</td>
<td>14.96</td>
<td>1.78</td>
</tr>
<tr>
<td>NR-43446</td>
<td>H37Rv:pEXCF-3050c</td>
<td>Rv3050c</td>
<td>13.91</td>
<td>14.87</td>
<td>0.95</td>
</tr>
<tr>
<td>NR-43447</td>
<td>H37Rv:pEXCF-3055</td>
<td>Rv3055</td>
<td>10.63</td>
<td>14.55</td>
<td>3.92</td>
</tr>
<tr>
<td>NR-43448</td>
<td>H37Rv:pEXCF-3058c</td>
<td>Rv3058c</td>
<td>13.29</td>
<td>14.93</td>
<td>1.64</td>
</tr>
<tr>
<td>NR-43449</td>
<td>H37Rv:pEXCF-3060c</td>
<td>Rv3060c</td>
<td>11.43</td>
<td>14.28</td>
<td>2.85</td>
</tr>
<tr>
<td>NR-43450</td>
<td>H37Rv:pEXCF-3066</td>
<td>Rv3066</td>
<td>9.54</td>
<td>14.55</td>
<td>5.01</td>
</tr>
<tr>
<td>NR-43451</td>
<td>H37Rv:pEXCF-3082c</td>
<td>Rv3082c</td>
<td>8.12</td>
<td>13.83</td>
<td>5.71</td>
</tr>
<tr>
<td>NR-43452</td>
<td>H37Rv:pEXCF-3095</td>
<td>Rv3095</td>
<td>12.60</td>
<td>14.92</td>
<td>2.32</td>
</tr>
<tr>
<td>NR-43453</td>
<td>H37Rv:pEXCF-3124</td>
<td>Rv3124</td>
<td>8.30</td>
<td>14.58</td>
<td>6.28</td>
</tr>
<tr>
<td>NR-43454</td>
<td>H37Rv:pEXNF-3133c</td>
<td>Rv3133c</td>
<td>12.20</td>
<td>14.68</td>
<td>2.48</td>
</tr>
<tr>
<td>NR-43455</td>
<td>H37Rv:pEXCF-3143</td>
<td>Rv3143</td>
<td>11.32</td>
<td>14.66</td>
<td>3.34</td>
</tr>
<tr>
<td>NR-43456</td>
<td>H37Rv:pEXCF-3160c</td>
<td>Rv3160c</td>
<td>11.99</td>
<td>14.93</td>
<td>2.94</td>
</tr>
<tr>
<td>NR-43457</td>
<td>H37Rv:pEXCF-3167c</td>
<td>Rv3167c</td>
<td>8.07</td>
<td>14.91</td>
<td>6.84</td>
</tr>
<tr>
<td>NR-43458</td>
<td>H37Rv:pEXCF-3173c</td>
<td>Rv3173c</td>
<td>12.88</td>
<td>14.67</td>
<td>1.79</td>
</tr>
<tr>
<td>NR-43459</td>
<td>H37Rv:pEXCF-3183</td>
<td>Rv3183</td>
<td>8.41</td>
<td>14.84</td>
<td>6.43</td>
</tr>
</tbody>
</table>
### Product Information Sheet for NR-43389

<table>
<thead>
<tr>
<th>NR Number</th>
<th>Strain Description</th>
<th>Rv Number</th>
<th>Basal level of Transcription Factor Expression $^{2,3}$</th>
<th>Induced Level of Transcription Factor Expression $^{2,4}$</th>
<th>Fold Change $^{5,6}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-43460</td>
<td>H37Rv:pEXCF-3197A</td>
<td>Rv3197A</td>
<td>11.77</td>
<td>14.68</td>
<td>2.91</td>
</tr>
<tr>
<td>NR-43461</td>
<td>H37Rv:pEXCF-3208</td>
<td>Rv3208</td>
<td>12.74</td>
<td>15.07</td>
<td>2.33</td>
</tr>
<tr>
<td>NR-43462</td>
<td>H37Rv:pEXCF-3219</td>
<td>Rv3219</td>
<td>14.51</td>
<td>14.98</td>
<td>1.01</td>
</tr>
<tr>
<td>NR-43464</td>
<td>H37Rv:pEXCF-3246c</td>
<td>Rv3246c</td>
<td>14.26</td>
<td>14.78</td>
<td>1.05</td>
</tr>
<tr>
<td>NR-43465</td>
<td>H37Rv:pEXCF-3249c</td>
<td>Rv3249c</td>
<td>13.04</td>
<td>14.66</td>
<td>1.62</td>
</tr>
<tr>
<td>NR-43466</td>
<td>H37Rv:pEXCF-3260c</td>
<td>Rv3260c</td>
<td>14.46</td>
<td>15.20</td>
<td>1.07</td>
</tr>
<tr>
<td>NR-43467</td>
<td>H37Rv:pEXCF-3286c</td>
<td>Rv3286c</td>
<td>10.53</td>
<td>14.43</td>
<td>3.90</td>
</tr>
<tr>
<td>NR-43468</td>
<td>H37Rv:pEXCF-3291c</td>
<td>Rv3291c</td>
<td>10.83</td>
<td>15.02</td>
<td>4.81</td>
</tr>
<tr>
<td>NR-43469</td>
<td>H37Rv:pEXCF-3295</td>
<td>Rv3295</td>
<td>13.28</td>
<td>14.69</td>
<td>1.14</td>
</tr>
<tr>
<td>NR-43470</td>
<td>H37Rv:pEXCF-3301c</td>
<td>Rv3301c</td>
<td>13.14</td>
<td>14.43</td>
<td>1.29</td>
</tr>
<tr>
<td>NR-43471</td>
<td>H37Rv:pEXCF-3328c</td>
<td>Rv3328c</td>
<td>11.80</td>
<td>14.69</td>
<td>2.88</td>
</tr>
<tr>
<td>NR-43472</td>
<td>H37Rv:pEXCF-3334</td>
<td>Rv3334</td>
<td>11.43</td>
<td>14.96</td>
<td>3.53</td>
</tr>
<tr>
<td>NR-43473</td>
<td>H37Rv:pEXCF-3405c</td>
<td>Rv3405c</td>
<td>10.23</td>
<td>14.84</td>
<td>4.61</td>
</tr>
<tr>
<td>NR-43474</td>
<td>H37Rv:pEXCF-3414c</td>
<td>Rv3414c</td>
<td>13.61</td>
<td>14.92</td>
<td>1.09</td>
</tr>
<tr>
<td>NR-43475</td>
<td>H37Rv:pEXCF-3416</td>
<td>Rv3416</td>
<td>12.77</td>
<td>15.09</td>
<td>2.32</td>
</tr>
<tr>
<td>NR-43476</td>
<td>H37Rv:pEXCF-3417c</td>
<td>Rv3417c</td>
<td>13.66</td>
<td>14.86</td>
<td>1.20</td>
</tr>
<tr>
<td>NR-43477</td>
<td>H37Rv:pEXCF-3488</td>
<td>Rv3488</td>
<td>10.08</td>
<td>14.30</td>
<td>4.32</td>
</tr>
<tr>
<td>NR-43478</td>
<td>H37Rv:pEXCF-3557c</td>
<td>Rv3557c</td>
<td>11.71</td>
<td>14.82</td>
<td>3.10</td>
</tr>
<tr>
<td>NR-43479</td>
<td>H37Rv:pEXCF-3574</td>
<td>Rv3574</td>
<td>11.31</td>
<td>14.67</td>
<td>3.36</td>
</tr>
<tr>
<td>NR-43480</td>
<td>H37Rv:pEXCF-3583c</td>
<td>Rv3583c</td>
<td>14.60</td>
<td>15.10</td>
<td>0.95</td>
</tr>
<tr>
<td>NR-43481</td>
<td>H37Rv:pEXCF-3597c</td>
<td>Rv3597c</td>
<td>13.88</td>
<td>14.83</td>
<td>0.95</td>
</tr>
<tr>
<td>NR-43482</td>
<td>H37Rv:pEXCF-3676</td>
<td>Rv3676</td>
<td>13.62</td>
<td>15.03</td>
<td>1.01</td>
</tr>
<tr>
<td>NR-43484</td>
<td>H37Rv:pEXCF-3681c</td>
<td>Rv3681c</td>
<td>12.62</td>
<td>12.81</td>
<td>1.01</td>
</tr>
<tr>
<td>NR-43485</td>
<td>H37Rv:pEXCF-3736</td>
<td>Rv3736</td>
<td>10.65</td>
<td>14.56</td>
<td>3.82</td>
</tr>
<tr>
<td>NR-43486</td>
<td>H37Rv:pEXCF-3744</td>
<td>Rv3744</td>
<td>12.13</td>
<td>14.21</td>
<td>2.83</td>
</tr>
<tr>
<td>NR-43487</td>
<td>H37Rv:pEXCF-3765c</td>
<td>Rv3765c</td>
<td>11.90</td>
<td>14.66</td>
<td>2.76</td>
</tr>
<tr>
<td>NR-43488</td>
<td>H37Rv:pEXCF-3830c</td>
<td>Rv3830c</td>
<td>9.08</td>
<td>13.71</td>
<td>4.63</td>
</tr>
<tr>
<td>NR-43489</td>
<td>H37Rv:pEXCF-3833</td>
<td>Rv3833</td>
<td>9.42</td>
<td>13.88</td>
<td>4.46</td>
</tr>
<tr>
<td>NR-43490</td>
<td>H37Rv:pEXCF-3840</td>
<td>Rv3840</td>
<td>8.49</td>
<td>14.80</td>
<td>6.31</td>
</tr>
<tr>
<td>NR-43491</td>
<td>H37Rv:pEXCF-3849</td>
<td>Rv3849</td>
<td>13.68</td>
<td>14.60</td>
<td>0.92</td>
</tr>
<tr>
<td>NR-43492</td>
<td>H37Rv:pEXCF-3852</td>
<td>Rv3852</td>
<td>13.99</td>
<td>14.50</td>
<td>0.52</td>
</tr>
<tr>
<td>NR-43493</td>
<td>H37Rv:pEXCF-3855</td>
<td>Rv3855</td>
<td>11.25</td>
<td>14.53</td>
<td>3.28</td>
</tr>
<tr>
<td>NR-43494</td>
<td>H37Rv:pEXCF-3862c</td>
<td>Rv3862c</td>
<td>8.94</td>
<td>14.34</td>
<td>5.40</td>
</tr>
<tr>
<td>NR-43495</td>
<td>H37Rv:pEXCF-3911</td>
<td>Rv3911</td>
<td>11.32</td>
<td>14.39</td>
<td>3.07</td>
</tr>
</tbody>
</table>

1. All information in this table was provided by the depositor at the time of deposition.
2. Expression values are the average from three or more microarrays in arbitrary units, log base two.
3. Level of expression: ■ - high expression (log$_2$ = 14); ○ - medium expression (log$_2$ = 10.5); □ - low expression (log$_2$ = 7).
4. Induction occurred over 18 hours in the presence of 100 ng/mL ATc.
5. Fold change is log base 2 (i.e. a fold change of 1 is two fold more expression in induced conditions, 2 is four fold, etc.)
6. Fold change in expression: ■ – 4 fold change (log$_2$ = 2); □ – no change (log$_2$ = 0); □ – 0.25 fold change (log$_2$ = -0.5).

© 2014 American Type Culture Collection (ATCC). All rights reserved.
Page 7 of 8
Table 2: Primers and Conditions for Sequencing pEX Plasmids

<table>
<thead>
<tr>
<th>Primer Name</th>
<th>Target</th>
<th>Tm (°C)</th>
<th>F/R</th>
<th>Primer Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS70</td>
<td>pDEST/EX vectors</td>
<td>62</td>
<td>Forward</td>
<td>5’ – catcatttcgacgccgagag -3’</td>
</tr>
<tr>
<td>AMS71</td>
<td>pDEST/EX vectors</td>
<td>63.8</td>
<td>Reverse</td>
<td>5’ – cgataacgttctggtctgatg -3’</td>
</tr>
</tbody>
</table>

Figure 1: Plasmid Map of pEXCF