

**Supplemental Material**

**Cross-Regulations among NRFs and KEAP1 and Effects of Their  
Silencing on Arsenic-Induced Antioxidant Response and Cytotoxicity  
in Human Keratinocytes**

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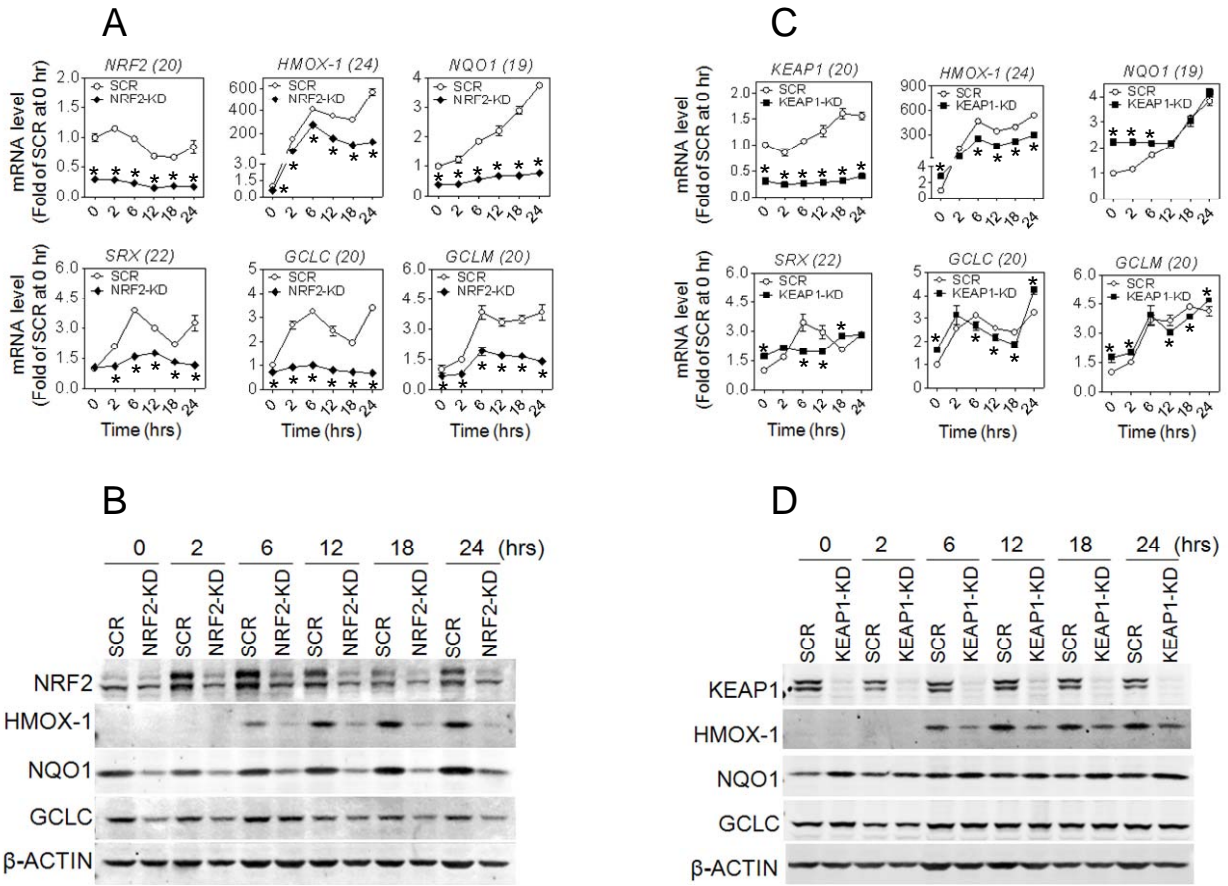
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**Supplemental Material, Table 1. Primer sequences for Real-time RT-PCR**

| Gene name      | GeneBank Accession | Position  | Forward (5' - 3')             | Reverse (5' - 3')         |
|----------------|--------------------|-----------|-------------------------------|---------------------------|
| <i>NRF2</i>    | NM-006164          | 398-488   | AACCAGTGGATCTGCCAACTACTC      | CTGCGCCAAAAGCTGCAT        |
| <i>KEAP1</i>   | NM_012289          | 2257-2342 | CCTCTGGCCGGGTAATAGG           | CCCCTCCCAGGTATCCAAGA      |
| <i>NRF1</i>    | <u>NM_003204</u>   | 4172-4259 | GCCCTGTTTCACTTATAGGGTCTAGA    | GGCAAAGAGAACATTTAGCAGCTT  |
| <i>HMOX1</i>   | NM_002133          | 1216-1294 | GCCTGGAAGACACCCTAATGTG        | GGCCGTGTCAACAAGGATACTT    |
| <i>NQO1</i>    | NM_000903          | 2154-2264 | ACTGCCCTCTTGTGGTGCAT          | GCTCGGTCCAATCCCTTCAT      |
| <i>SRX</i>     | NM_080725          | 326-400   | GGAGGTGACTACTTCTACTCCTTTGG    | GATGGTCTCTCGTGCAGTTG      |
| <i>GCLC</i>    | NM_001498          | 1521-1625 | GATGCTGTCTTGCAGGGAATG         | AGCGAGCTCCGTGCTGTT        |
| <i>GCLM</i>    | NM_002061          | 830-910   | ACAGGTAACCAAAATAGTAACAAAGTTAA | TGTTTAGCAAATGCAGTCAAATCTG |
| <i>β-ACTIN</i> | X00351             | 1088-1063 | GTCCACCTCCAGCAGATGTG          | GCATTTGCGGTGGACGAT        |



**Supplemental Material, Figure 1.** Time-course of  $iAs^{3+}$ -induced mRNA (A and C) and protein (B and D) expression of NRF2, KEAP1 and ARE-dependent antioxidant genes in *NRF2*-KD (A and B) and *KEAP1*-KD (C and D) cells. Cells were exposed to 10  $\mu M$   $iAs^{3+}$  or Vehicle for indicated times. \*,  $p < 0.05$  vs. SCR with the same treatment.