

Supplemental Table 2: Hypoxia Gene Array. The genes *Epo* and *Hnf4a* were removed from post-hoc analysis as transcripts were undetected in all groups .

| Group           | Unigene      | GeneBank     | Symbol          | Description                                                                |                        |
|-----------------|--------------|--------------|-----------------|----------------------------------------------------------------------------|------------------------|
| HIF1A Signaling | Mm.334517    | NM_001039562 | <i>Ankrd37</i>  | Ankyrin repeat domain 37                                                   |                        |
|                 | Mm.239117    | NM_009687    | <i>Apex1</i>    | Apurinic/apyrimidinic endonuclease 1                                       |                        |
|                 | Mm.250265    | NM_009709    | <i>Arnt</i>     | Aryl hydrocarbon receptor nuclear translocator                             |                        |
|                 | Mm.2436      | NM_011498    | <i>Bhlhe40</i>  | Basic helix-loop-helix family, member e40                                  |                        |
|                 | Mm.402384    | NM_013715    | <i>Cops5</i>    | COP9 (constitutive photomorphogenic) homolog, subunit 5 (Arabidopsis)      |                        |
|                 | Mm.474586    | NM_008906    | <i>Ctsa</i>     | Cathepsin A                                                                |                        |
|                 | Mm.391807    | NM_016775    | <i>Dnajc5</i>   | DnaJ (Hsp40) homolog, subfamily C, member 5                                |                        |
|                 | Mm.140619    | NM_053207    | <i>Egln1</i>    | EGL nine homolog 1 (C. elegans)                                            |                        |
|                 | Mm.29978     | NM_053208    | <i>Egln2</i>    | EGL nine homolog 2 (C. elegans)                                            |                        |
|                 | Mm.6700      | NM_007918    | <i>Eif4ebp1</i> | Eukaryotic translation initiation factor 4E binding protein 1              |                        |
|                 | Mm.246513    | NM_010234    | <i>Fos</i>      | FBJ osteosarcoma oncogene                                                  |                        |
|                 | Mm.446610    | NM_010431    | <i>Hif1a</i>    | Hypoxia inducible factor 1, alpha subunit                                  |                        |
|                 | Mm.145278    | NM_176958    | <i>Hif1an</i>   | Hypoxia-inducible factor 1, alpha subunit inhibitor                        |                        |
|                 | Mm.135110    | NM_016868    | <i>Hif3a</i>    | Hypoxia inducible factor 3, alpha subunit                                  |                        |
|                 | Mm.202383    | NM_008261    | <i>Hnf4a</i>    | Hepatic nuclear factor 4, alpha                                            |                        |
|                 | Mm.248615    | NM_010705    | <i>Lgals3</i>   | Lectin, galactose binding, soluble 3                                       |                        |
|                 | Mm.15918     | NM_011945    | <i>Map3k1</i>   | Mitogen-activated protein kinase kinase kinase 1                           |                        |
|                 | Mm.301039    | NM_010881    | <i>Ncoa1</i>    | Nuclear receptor coactivator 1                                             |                        |
|                 | Mm.256765    | NM_008689    | <i>Nfkb1</i>    | Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1, p105 |                        |
|                 | Mm.2212      | NM_011030    | <i>P4ha1</i>    | Procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), |                        |
|                 | Mm.16660     | NM_011032    | <i>P4hb</i>     | Prolyl 4-hydroxylase, beta polypeptide                                     |                        |
|                 | Mm.7373      | NM_011065    | <i>Per1</i>     | Period homolog 1 (Drosophila)                                              |                        |
|                 | Mm.488709    | NM_009035    | <i>Rbpj</i>     | Recombination signal binding protein for immunoglobulin kappa J region     |                        |
|                 | Mm.222       | NM_011640    | <i>Trp53</i>    | Transformation related protein 53                                          |                        |
|                 | Mm.322453    | NM_011680    | <i>Usf2</i>     | Upstream transcription factor 2                                            |                        |
|                 | Angiogenesis | Mm.40740     | NM_007413       | <i>Adora2b</i>                                                             | Adenosine A2b receptor |
|                 |              | Mm.196189    | NM_020581       | <i>Angptl4</i>                                                             | Angiopoietin-like 4    |
|                 |              | Mm.238343    | NM_007585       | <i>Anxa2</i>                                                               | Annexin A2             |
| Mm.378890       |              | NM_009760    | <i>Bnip3</i>    | BCL2/adenovirus E1B interacting protein 3                                  |                        |
| Mm.347081       |              | NM_009761    | <i>Bnip3l</i>   | BCL2/adenovirus E1B interacting protein 3-like                             |                        |
| Mm.14543        |              | NM_010104    | <i>Edn1</i>     | Endothelin 1                                                               |                        |
| Mm.349116       |              | NM_007942    | <i>Epo</i>      | Erythropoietin                                                             |                        |
| Mm.273188       |              | NM_010171    | <i>F3</i>       | Coagulation factor III                                                     |                        |
| Mm.276389       |              | NM_010442    | <i>Hmox1</i>    | Heme oxygenase (decycling) 1                                               |                        |
| Mm.481684       |              | NM_033398    | <i>Jmjd6</i>    | Jumonji domain containing 6                                                |                        |
| Mm.488403       |              | NM_010728    | <i>Lox</i>      | Lysyl oxidase                                                              |                        |
| Mm.4406         |              | NM_013599    | <i>Mmp9</i>     | Matrix metalloproteinase 9                                                 |                        |
| Mm.4809         |              | NM_008827    | <i>Pgf</i>      | Placental growth factor                                                    |                        |
| Mm.4183         |              | NM_008873    | <i>Plau</i>     | Plasminogen activator, urokinase                                           |                        |
| Mm.250422       |              | NM_008871    | <i>Serpine1</i> | Serine (or cysteine) peptidase inhibitor, clade E, member 1                |                        |
| Mm.282184       |              | NM_009505    | <i>Vegfa</i>    | Vascular endothelial growth factor A                                       |                        |

| Group                 | Unigene   | GeneBank  | Symbol         | Description                                                           |
|-----------------------|-----------|-----------|----------------|-----------------------------------------------------------------------|
| Glycolytic Metabolism | Mm.275831 | NM_007438 | <i>Aldoa</i>   | Aldolase A, fructose-bisphosphate                                     |
|                       | Mm.283682 | NM_139305 | <i>Car9</i>    | Carbonic anhydrase 9                                                  |
|                       | Mm.372357 | NM_023119 | <i>Eno1</i>    | Enolase 1, alpha non-neuron                                           |
|                       | Mm.387108 | NM_015774 | <i>Ero1l</i>   | ERO1-like ( <i>S. cerevisiae</i> )                                    |
|                       | Mm.262589 | NM_007972 | <i>F10</i>     | Coagulation factor X                                                  |
|                       | Mm.396102 | NM_028803 | <i>Gbe1</i>    | Glucan (1,4-alpha-), branching enzyme 1                               |
|                       | Mm.14583  | NM_013528 | <i>Gfpt</i>    | Glutamine--Fructose-6-Phosphate Transaminase 1                        |
|                       | Mm.589    | NM_008155 | <i>Gpi1</i>    | Glucose phosphate isomerase 1                                         |
|                       | Mm.275654 | NM_030678 | <i>Gys1</i>    | Glycogen synthase 1, muscle                                           |
|                       | Mm.469167 | NM_013820 | <i>Hk2</i>     | Hexokinase 2                                                          |
|                       | Mm.29324  | NM_010699 | <i>Ldha</i>    | Lactate dehydrogenase A                                               |
|                       | Mm.34411  | NM_172665 | <i>Pdk1</i>    | Pyruvate dehydrogenase kinase, isoenzyme 1                            |
|                       | Mm.19669  | NM_133232 | <i>Pfkfb3</i>  | 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3                 |
|                       | Mm.132391 | NM_173019 | <i>Pfkfb4</i>  | 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4                 |
|                       | Mm.269649 | NM_008826 | <i>Pfkl</i>    | Phosphofructokinase, liver, B-type                                    |
|                       | Mm.273874 | NM_019703 | <i>Pfkp</i>    | Phosphofructokinase, platelet                                         |
|                       | Mm.391589 | NM_023418 | <i>Pgam1</i>   | Phosphoglycerate mutase 1                                             |
|                       | Mm.336204 | NM_008828 | <i>Pgk1</i>    | Phosphoglycerate kinase 1                                             |
|                       | Mm.488724 | NM_011099 | <i>Pkm</i>     | Pyruvate kinase, muscle                                               |
|                       | Mm.28632  | NM_030696 | <i>Slc16a3</i> | Solute carrier family 16 (monocarboxylic acid transporters), member 3 |
|                       | Mm.21002  | NM_011400 | <i>Slc2a1</i>  | Solute carrier family 2 (facilitated glucose transporter), member 1   |
|                       | Mm.395108 | NM_011401 | <i>Slc2a3</i>  | Solute carrier family 2 (facilitated glucose transporter), member 3   |
|                       | Mm.28683  | NM_011638 | <i>Tfrc</i>    | Transferrin receptor                                                  |
|                       | Mm.439915 | NM_009415 | <i>Tpi1</i>    | Triosephosphate isomerase 1                                           |
|                       | Mm.216558 | NM_139297 | <i>Ugp2</i>    | UDP-Glucose Pyrophosphorylase 2                                       |
|                       | Mm.470023 | NM_011694 | <i>Vdac1</i>   | Voltage-dependent anion channel 1                                     |
| Cell Fate             | Mm.1408   | NM_009627 | <i>Adm</i>     | Adrenomedullin                                                        |
|                       | Mm.212462 | NM_019864 | <i>Atr</i>     | Ataxia telangiectasia and rad3 related                                |
|                       | Mm.12932  | NM_007550 | <i>Blm</i>     | Bloom syndrome, RecQ helicase-like                                    |
|                       | Mm.23811  | NM_007569 | <i>Btg1</i>    | B-cell translocation gene 1, anti-proliferative                       |
|                       | Mm.3527   | NM_007635 | <i>Ccng2</i>   | Cyclin G2                                                             |
|                       | Mm.21697  | NM_029083 | <i>Ddit4</i>   | DNA-damage-inducible transcript 4                                     |
|                       | Mm.181959 | NM_007913 | <i>Egr1</i>    | Early growth response 1                                               |
|                       | Mm.25613  | NM_133662 | <i>Ier3</i>    | Immediate early response 3                                            |
|                       | Mm.29254  | NM_008343 | <i>Igfbp3</i>  | Insulin-like growth factor binding protein 3                          |
|                       | Mm.86844  | NM_008591 | <i>Met</i>     | Met proto-oncogene                                                    |
|                       | Mm.2326   | NM_010798 | <i>Mif</i>     | Macrophage migration inhibitory factor                                |
|                       | Mm.2154   | NM_010847 | <i>Mxi1</i>    | Max interacting protein 1                                             |
|                       | Mm.202727 | NM_021524 | <i>Nampt</i>   | Nicotinamide phosphoribosyltransferase                                |
|                       | Mm.30837  | NM_008681 | <i>Ndrp1</i>   | N-myc downstream regulated gene 1                                     |
|                       | Mm.258415 | NM_008713 | <i>Nos3</i>    | Nitric oxide synthase 3, endothelial cell                             |
|                       | Mm.472891 | NM_013614 | <i>Odc1</i>    | Ornithine decarboxylase, structural 1                                 |
|                       | Mm.485038 | NM_008842 | <i>Pim1</i>    | Proviral integration site 1                                           |
|                       | Mm.34410  | NM_011304 | <i>Ruvbl2</i>  | RuvB-like protein 2                                                   |
|                       | Mm.475353 | NM_023719 | <i>Txnip</i>   | Thioredoxin interacting protein                                       |