##########

GROUP MEASUREMENT CURVES

##########

T2D\_PBMC:

Measurement 1: 14.0428571429 + 0.886387159664

Measurement 2: 14.0057142857 + 0.832040006504

Measurement 3: 14.0814285714 + 0.763615469973

Measurement 4: 6.59142857143 + 0.289185088071

Measurement 5: 6.33428571429 + 0.217916067863

Measurement 6: 6.21 + 0.240964526123

Measurement 7: 30.1257142857 + 2.75744169328

Measurement 8: 29.8228571429 + 2.493671672

Measurement 9: 32.2128571429 + 2.40860906338

Measurement 10: 5.36714285714 + 0.0322117465554

Measurement 11: 5.4 + 0.0234441355182

Measurement 12: 5.28857142857 + 0.026727534399

T2D\_T:

Measurement 1: 13.3957142857 + 0.678811437204

Measurement 2: 13.2963796477 + 0.648437118667

Measurement 3: 13.263111546 + 0.641997514304

Measurement 4: 8.82571428571 + 0.258030581736

Measurement 5: 8.82084148728 + 0.225815865331

Measurement 6: 9.0439334638 + 0.218040204606

Measurement 7: 49.0042857143 + 5.65800237776

Measurement 8: 43.8928571429 + 4.78353534028

Measurement 9: 41.0371428571 + 4.65700056246

Measurement 10: 7.52142857143 + 0.0537936122086

Measurement 11: 7.52142857143 + 0.0159385173967

Measurement 12: 7.41142857143 + 0.0827438389032

L\_T:

Measurement 1: 9.22047619048 + 0.491493247443

Measurement 2: 8.83714285714 + 0.499095170162

Measurement 3: 9.03880952381 + 0.496494072643

Measurement 4: 6.20285714286 + 0.254810992994

Measurement 5: 6.57142857143 + 0.274219261569

Measurement 6: 6.89714285714 + 0.255608308672

Measurement 7: 25.7231428571 + 2.13785112183

Measurement 8: 21.5531428571 + 1.74137347548

Measurement 9: 19.2651428571 + 1.5042556209

Measurement 10: 5.87714285714 + 0.0878550024395

Measurement 11: 5.87714285714 + 0.0285297048408

Measurement 12: 5.87285714286 + 0.0360593173854

T2D\_T40:

Measurement 1: 44.11 + 3.00397550465

Measurement 2: 44.9125 + 2.96319877645

Measurement 3: 44.56 + 2.6952017975

Measurement 4: 20.5625 + 1.63796291072

Measurement 5: 22.1475 + 1.82420803451

Measurement 6: 22.3025 + 1.51425785767

Measurement 7: 55.7175 + 2.35948893338

Measurement 8: 53.7775 + 2.94374958169

Measurement 9: 50.7875 + 3.40203000941

Measurement 10: 14.7225 + 4.91651895145

Measurement 11: 14.455 + 0.282503209679

Measurement 12: 14.3825 + 0.426609747587

L\_B:

Measurement 1: 8.83362989324 + 0.751772778931

Measurement 2: 8.65480427046 + 0.732270723578

Measurement 3: 8.8487544484 + 0.806504353631

Measurement 4: 4.54270462633 + 0.608967405862

Measurement 5: 4.51868327402 + 0.30762919573

Measurement 6: 4.58007117438 + 0.299450914453

Measurement 7: 23.3798932384 + 0.173002103938

Measurement 8: 22.7722419929 + 0.0805246156511

Measurement 9: 22.0542704626 + 0.181809483775

Measurement 10: 4.66814946619 + 0.00440368991842

Measurement 11: 4.77491103203 + 0.00188729567932

Measurement 12: 4.79270462633 + 0.0144692668748

T1D\_PBMC:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Measurement | 1: | 9.42857142857 | + | 1.30571339075 |
| Measurement | 2: | 9.48428571429 | + | 1.30493402051 |
| Measurement | 3: | 9.58714285714 | + | 1.28631508299 |
| Measurement | 4: | 4.78 | + | 0.441593525285 |
| Measurement | 5: | 4.88714285714 | + | 0.421029313844 |
| Measurement | 6: | 4.88714285714 | + | 0.349036858815 |
| Measurement | 7: | 25.0785714286 | + | 2.79697848849 |
| Measurement | 8: | 19.7814285714 | + | 2.81311715922 |
| Measurement | 9: | 17.99 | + | 3.25395165881 |
| Measurement | 10: | 3.64285714286 | + | 0.0796502024835 |
| Measurement | 11: | 3.74428571429 | + | 0.0237138148389 |
| Measurement | 12: | 3.74428571429 | + | 0.0669595235318 |

T2D\_T40 (2.0):

Measurement 1: 8.364 + 0.0

Measurement 2: 7.396 + 0.0

Measurement 3: 7.48 + 0.0

Measurement 4: 4.424 + 0.0

Measurement 5: 3.64 + 0.0

Measurement 6: 4.444 + 0.0

Measurement 7: 12.378 + 0.0

Measurement 8: 11.938 + 0.0

Measurement 9: 12.012 + 0.0

Measurement 10: 2.842 + 0.0

Measurement 11: 3.448 + 0.0

Measurement 12: 3.274 + 0.0

L\_PBMC:

Measurement 1: 9.65142857143 + 0.614967969372

Measurement 2: 9.68571428571 + 0.582826008631

Measurement 3: 9.85142857143 + 0.570425342695

Measurement 4: 5.78428571429 + 0.191638925656

Measurement 5: 5.91142857143 + 0.200239324425

Measurement 6: 5.77142857143 + 0.196611858973

Measurement 7: 25.13 + 2.47703841593

Measurement 8: 21.5314285714 + 2.29046105641

Measurement 9: 18.9939285714 + 2.07397595895

Measurement 10: 4.83714285714 + 0.104110433693

Measurement 11: 4.95142857143 + 0.0120760820761

Measurement 12: 4.95142857143 + 0.0424532065333

ND\_T:

Measurement 1: 12.5328571429 + 0.984898730938

Measurement 2: 11.8542857143 + 0.798020510196

Measurement 3: 11.4671428571 + 0.766705781315

Measurement 4: 3.20214285714 + 0.260114280222

Measurement 5: 3.49071428571 + 0.115662466351

Measurement 6: 3.315 + 0.053033008589

Measurement 7: 28.2857142857 + 0.0494974746831

Measurement 8: 23.6421428571 + 0.160109178312

Measurement 9: 20.98 + 0.0343451865148

Measurement 10: 1.57214285714 + 0.129804601975

Measurement 11: 1.37357142857 + 0.00858629662869

Measurement 12: 1.37642857143 + 0.00656599153959

L\_T40:

Measurement 1: 21.765 + 2.52793971597

Measurement 2: 26.405 + 2.35039394804

Measurement 3: 26.69 + 2.65733435196

Measurement 4: 16.8542857143 + 2.30001123634

Measurement 5: 15.44 + 1.75658685664

Measurement 6: 14.87 + 1.53192180816

Measurement 7: 30.9177777778 + 2.85995261666

Measurement 8: 27.2273015873 + 3.18349390916

Measurement 9: 28.8542857143 + 3.15917744835

Measurement 10: 10.14 + 0.329732012398

Measurement 11: 9.63 + 5.47310295614

Measurement 12: 10.14 + 3.23804469877

ND\_T40:

Measurement 1: 46.875 + 0.0

Measurement 2: 46.665 + 0.0

Measurement 3: 46.27 + 0.0

Measurement 4: 44.34 + 0.0

Measurement 5: 40.425 + 0.0

Measurement 6: 38.63 + 0.0

Measurement 7: 40.445 + 0.0

Measurement 8: 39.29 + 0.0

Measurement 9: 37.18 + 0.0

Measurement 10: 23.82 + 0.0

Measurement 11: 23.59 + 0.0

Measurement 12: 22.85 + 0.0

ND\_PBMC:

Measurement 1: 11.6328571429 + 0.0540275118181

Measurement 2: 11.4928571429 + 0.0674926159842

Measurement 3: 11.6571428571 + 0.151503924548

Measurement 4: 3.99714285714 + 0.0593655037758

Measurement 5: 3.85 + 0.154306778887

Measurement 6: 3.86571428571 + 0.0876871715844

Measurement 7: 33.7314285714 + 2.59163200756

Measurement 8: 30.1657142857 + 2.88273414665

Measurement 9: 27.9085714286 + 2.39040649996

Measurement 10: 2.63285714286 + 0.0572115988642

Measurement 11: 2.49857142857 + 0.0

Measurement 12: 2.23142857143 + 0.118777471263

ERROR:

Measurement 1: 0 + 0.0

Measurement 2: 0 + 0.0

Measurement 3: 0 + 0.0

Measurement 4: 0 + 0.0

Measurement 5: 0 + 0.0

Measurement 6: 0 + 0.0

Measurement 7: 0 + 0.0

Measurement 8: 0 + 0.0

Measurement 9: 0 + 0.0

Measurement 10: 0 + 0.0

Measurement 11: 0 + 0.0

Measurement 12: 0 + 0.0

L\_DNB40:

Measurement 1: 0 + 0.0

Measurement 2: 0 + 0.0

Measurement 3: 0 + 0.0

Measurement 4: 0 + 0.0

Measurement 5: 0 + 0.0

Measurement 6: 0 + 0.0

Measurement 7: 0 + 0.0

Measurement 8: 0 + 0.0

Measurement 9: 0 + 0.0

Measurement 10: 0 + 0.0

Measurement 11: 0 + 0.0

Measurement 12: 0 + 0.0

T2D\_DNB40:

Measurement 1: 0 + 0.0

Measurement 2: 0 + 0.0

Measurement 3: 0 + 0.0

Measurement 4: 0 + 0.0

Measurement 5: 0 + 0.0

Measurement 6: 0 + 0.0

Measurement 7: 0 + 0.0

Measurement 8: 0 + 0.0

Measurement 9: 0 + 0.0

Measurement 10: 0 + 0.0

Measurement 11: 0 + 0.0

Measurement 12: 0 + 0.0

L\_TB40:

Measurement 1: 0 + 0

Measurement 2: 0 + 0

Measurement 3: 0 + 0

Measurement 4: 0 + 0

Measurement 5: 0 + 0

Measurement 6: 0 + 0

Measurement 7: 0 + 0

Measurement 8: 0 + 0

Measurement 9: 0 + 0

Measurement 10: 0 + 0

Measurement 11: 0 + 0

Measurement 12: 0 + 0

T2D\_TB40:

Measurement 1: 43.0471698113 + 0.0

Measurement 2: 41.7830188679 + 0.0

Measurement 3: 43.6698113208 + 0.0

Measurement 4: 32.679245283 + 0.0

Measurement 5: 32.8867924528 + 0.0

Measurement 6: 29.5283018868 + 0.0

Measurement 7: 53.8679245283 + 0.0

Measurement 8: 49.9811320755 + 0.0

Measurement 9: 45.6886792453 + 0.0

Measurement 10: 12.0188679245 + 0.0

Measurement 11: 12.4716981132 + 0.0

Measurement 12: 12.6320754717 + 0.0

L\_DN:

Measurement 1: 0 + 0.0

Measurement 2: 0 + 0.0

Measurement 3: 0 + 0.0

Measurement 4: 0 + 0.0

Measurement 5: 0 + 0.0

Measurement 6: 0 + 0.0

Measurement 7: 0 + 0.0

Measurement 8: 0 + 0.0

Measurement 9: 0 + 0.0

Measurement 10: 0 + 0.0

Measurement 11: 0 + 0.0

Measurement 12: 0 + 0.0

L\_DN40:

Measurement 1: 0 + 0.0

Measurement 2: 0 + 0.0

Measurement 3: 0 + 0.0

Measurement 4: 0 + 0.0

Measurement 5: 0 + 0.0

Measurement 6: 0 + 0.0

Measurement 7: 0 + 0.0

Measurement 8: 0 + 0.0

Measurement 9: 0 + 0.0

Measurement 10: 0 + 0.0

Measurement 11: 0 + 0.0

Measurement 12: 0 + 0.0

T2D\_DN40:

Measurement 1: 0 + 0.0

Measurement 2: 0 + 0.0

Measurement 3: 0 + 0.0

Measurement 4: 0 + 0.0

Measurement 5: 0 + 0.0

Measurement 6: 0 + 0.0

Measurement 7: 0 + 0.0

Measurement 8: 0 + 0.0

Measurement 9: 0 + 0.0

Measurement 10: 0 + 0.0

Measurement 11: 0 + 0.0

Measurement 12: 0 + 0.0

##########

GROUP RESPIRATION CALCULATIONS

##########

Background

Non-Mitochondrial Respiration = 0 + 0

Basal Respiration = 0.0 + 0.0

OCR:ECAR = 0.0 + 0.0

Proton Leak = 0 + 0.0

ATP Production = 0.0 + 0.0

Maximal Respiration = 0 + 0.0

OCR:ECAR = 0 + 0.0

Spare Respiratory Capacity = 0.0 + 0.0

T2D\_PBMC

Non-Mitochondrial Respiration = 5.36714285714 + 0.0322117465554

Basal Respiration = 8.67642857143 + 0.565585878729

OCR:ECAR = 2.8605096706 + 0.17562252915

Proton Leak = 0.967142857143 + 0.220283928713

ATP Production = 7.70928571429 + 0.606969847247

Maximal Respiration = 26.8457142857 + 2.40882444707

OCR:ECAR = 2.49810767916 + 0.138289116692

Spare Respiratory Capacity = 18.1692857143 + 2.47433275916

T2D\_T

Non-Mitochondrial Respiration = 7.52142857143 + 0.0537936122086

Basal Respiration = 5.75831702544 + 0.459403557914

OCR:ECAR = 2.38217940248 + 0.572768529831

Proton Leak = 1.30428571429 + 0.263578325788

ATP Production = 4.45403131115 + 0.529646261999

Maximal Respiration = 41.4828571429 + 5.6582580941

OCR:ECAR = 3.17786648924 + 0.425029147632

Spare Respiratory Capacity = 35.7245401174 + 5.67687733604

L\_T

Non-Mitochondrial Respiration = 5.87714285714 + 0.0878550024395

Basal Respiration = 3.06083333333 + 0.362793453243

OCR:ECAR = 2.90691023536 + 0.24914428344

Proton Leak = 0.694285714286 + 0.287949135906

ATP Production = 2.36654761905 + 0.463177929726

Maximal Respiration = 19.846 + 2.1396555612

OCR:ECAR = 4.03285776048 + 0.279224682756

Spare Respiratory Capacity = 16.7851666667 + 2.1701946941

T2D\_T40

Non-Mitochondrial Respiration = 14.455 + 0.282503209679

Basal Respiration = 30.28125 + 2.02261538434

OCR:ECAR = 0.686941696676 + 0.0743783420929

Proton Leak = 7.6925 + 1.84595314584

ATP Production = 22.58875 + 2.73834183579

Maximal Respiration = 41.2625 + 2.37634090362

OCR:ECAR = 0.714001040465 + 0.0878856058649

Spare Respiratory Capacity = 10.98125 + 3.12057191604

L\_B

Non-Mitochondrial Respiration = 4.77491103203 + 0.00188729567932

Basal Respiration = 3.9768683274 + 0.544675117059

OCR:ECAR = 3.6375852564 + 0.110791270855

Proton Leak = 0 + 0.608970330383

ATP Production = 3.9768683274 + 0.817016429719

Maximal Respiration = 18.6049822064 + 0.173012397972

OCR:ECAR = 3.05354084806 + 0.0677776275137

Spare Respiratory Capacity = 14.628113879 + 0.571493020951

T1D\_PBMC

|  |  |  |
| --- | --- | --- |
| Non-Mitochondrial Respiration | 3.74428571429 | 0.0237138148389 |
| Basal Respiration | 5.79142857143 | 0.916475404835 |
| OCR:ECAR | 2.789220174 | 0.255438629432 |
| Proton Leak | 1.14285714286 | 0.421696606733 |
| ATP Production | 4.64857142857 | 1.00883853802 |
| Maximal Respiration | 21.3342857143 | 2.79707901392 |
| OCR:ECAR | 2.86128581412 | 0.162271729172 |
| Spare Respiratory Capacity | 15.5428571429 | 2.94339568828 |

T2D\_T40 (2.0)

Non-Mitochondrial Respiration = 3.274 , 0.0

Basal Respiration = 4.164 , 0.0

OCR:ECAR = 0.862131556553 , 0.0

Proton Leak = 1.15 , 0.0

ATP Production = 3.014 , 0.0

Maximal Respiration = 9.104 , 0.0

OCR:ECAR = 0.948942042318 , 0.0

Spare Respiratory Capacity = 4.94 , 0.0

L\_PBMC

Non-Mitochondrial Respiration = 4.95142857143 , 0.0120760820761

Basal Respiration = 4.81714285714 , 0.407938278101

OCR:ECAR = 2.45898349891 , 0.271005323058

Proton Leak = 0.832857142857 , 0.192019034434

ATP Production = 3.98428571429 , 0.450871321249

Maximal Respiration = 20.1785714286 , 2.47706785247

OCR:ECAR = 2.77751901879 , 0.116644570776

Spare Respiratory Capacity = 15.3614285714 , 2.51043398329

Unassigned

Non-Mitochondrial Respiration = 0 , 0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0

ND\_T

Non-Mitochondrial Respiration = 1.37642857143 , 0.00656599153959

Basal Respiration = 10.2842857143 , 0.553364016443

OCR:ECAR = 3.71261151229 , 0.160569891697

Proton Leak = 1.93857142857 , 0.0534379288979

ATP Production = 8.34571428571 , 0.555938258207

Maximal Respiration = 26.9092857143 , 0.0499310749423

OCR:ECAR = 3.53843166518 , 0.0548673123653

Spare Respiratory Capacity = 16.625 , 0.555612137141

L\_T40

Non-Mitochondrial Respiration = 10.14 , 0.329732012398

Basal Respiration = 16.4075 , 1.80420830069

OCR:ECAR = 0.492277283428 , 0.0661452766771

Proton Leak = 5.3 , 1.78726623225

ATP Production = 11.1075 , 2.53958425283

Maximal Respiration = 20.7777777778 , 2.87889773516

OCR:ECAR = 0.568450892113 , 0.0222424185527

Spare Respiratory Capacity = 4.37027777778 , 3.39753142175

ND\_T40

Non-Mitochondrial Respiration = 23.59 , 0.0

Basal Respiration = 22.8775 , 0.0

OCR:ECAR = 0.660498152741 , 0.0

Proton Leak = 16.835 , 0.0

ATP Production = 6.0425 , 0.0

Maximal Respiration = 16.855 , 0.0

OCR:ECAR = 0.608744732089 , 0.0

Spare Respiratory Capacity = -6.0225 , 0.0

ND\_PBMC

Non-Mitochondrial Respiration = 2.49857142857 , 0.0

Basal Respiration = 9.07642857143 , 0.0829287229581

OCR:ECAR = 2.68566364543 , 0.158733055705

Proton Leak = 1.36714285714 , 0.0876871715844

ATP Production = 7.70928571429 , 0.120690567784

Maximal Respiration = 31.2328571429 , 2.59163200756

OCR:ECAR = 2.90250193449 , 0.133084673475

Spare Respiratory Capacity = 22.1564285714 , 2.59295847165

ERROR

Non-Mitochondrial Respiration = 0 , 0.0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0

L\_DNB40

Non-Mitochondrial Respiration = 0 , 0.0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0

T2D\_DNB40

Non-Mitochondrial Respiration = 0 , 0.0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0

L\_TB40

Non-Mitochondrial Respiration = 0 , 0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0

Spare Respiratory Capacity = 0.0 , 0.0

T2D\_TB40

Non-Mitochondrial Respiration = 12.4716981132 , 0.0

Basal Respiration = 30.2547169811 , 0.0

OCR:ECAR = 0.616724921492 , 0.0

Proton Leak = 20.2075471698 , 0.0

ATP Production = 10.0471698113 , 0.0

Maximal Respiration = 41.3962264151 , 0.0

OCR:ECAR = 0.636850323444 , 0.0

Spare Respiratory Capacity = 11.141509434 , 0.0

L\_DN

Non-Mitochondrial Respiration = 0 , 0.0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0

L\_DN40

Non-Mitochondrial Respiration = 0 , 0.0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0

T2D\_DN40

Non-Mitochondrial Respiration = 0 , 0.0

Basal Respiration = 0.0 , 0.0

OCR:ECAR = 0.0 , 0.0

Proton Leak = 0 , 0.0

ATP Production = 0.0 , 0.0

Maximal Respiration = 0 , 0.0

OCR:ECAR = 0 , 0.0

Spare Respiratory Capacity = 0.0 , 0.0