

a. LucF activity in untreated condition

Time	Experiment	A	B	C	Mean	SD	Mean	SD
0 hr	1	601244.2	534885.5	549595.8	561908.5	34850.7	992859.8	316484.1
	2	1025826.8	1044155.5	861535.5	977172.6	100563.1		
	3	1443391.2	1377012.2	1498091.8	1439498.4	60633.6		
30 min	1	640894.5	616499.0	713484.8	656959.4	50449.2	1050940.1	308453.2
	2	1057663.5	1004997.5	890785.5	984482.2	85309.6		
	3	1504549.5	1430436.0	1599150.8	1511378.8	84564.5		
1 hr	1	599923.0	705601.5	663877.5	656467.3	53227.5	1141165.4	350661.1
	2	1411343.0	1017284.8	1154239.8	1194289.2	200058.6		
	3	1599517.0	1420691.2	1698010.8	1572739.7	140585.6		
2 hr	1	729739.5	730748.8	723267.5	727918.6	4059.5	1177149.7	313706.4
	2	1113164.2	1266653.2	1403928.5	1261248.6	145457.5		
	3	1354570.5	1644323.2	1627951.8	1542281.8	162768.7		
4 hr	1	810873.8	693798.2	771328.5	758666.8	59556.0	1386519.1	418568.2
	2	1698900.0	1502423.0	1715199.7	1638840.9	118422.1		
	3	1758892.5	1789613.5	1737642.8	1762049.6	26128.8		
6 hr	1	562260.0	499632.7	474672.3	512188.3	45123.5	1247402.9	490143.0
	2	1765272.7	1781636.0	1818734.7	1788547.8	27393.0		
	3	1424165.0	1366460.7	1533792.0	1441472.6	84997.7		
8 hr	1	481132.0	506849.7	470922.7	486301.4	18513.0	1269974.8	522448.9
	2	1848688.0	1937322.3	1868450.7	1884820.3	46529.4		
	3	1360454.7	1398798.0	1557155.0	1438802.6	104273.8		
16 hr	1	521239.7	568662.0	566892.0	552264.6	26882.9	1132800.6	387024.0
	2	1593295.2	1596525.8	1223091.2	1470970.7	214676.1		
	3	1410000.3	1404281.0	1311218.3	1375166.6	55454.6		

b. LucR activity in untreated condition

Time	Experiment	A	B	C	Mean	SD	Mean	SD
0 hr	1	9185735.8	7879593.5	8580291.2	8548540.2	653649.8	17289148.6	5827072.3
	2	22667079.5	22121995.5	21020088.8	21936387.9	839036.5		
	3	21356100.7	21408528.5	21382924.0	21382517.7	26216.3		
30 min	1	10294485.8	9744622.0	10607055.8	10215387.9	436623.9	18029453.3	5209376.9
	2	23429258.8	21272426.5	21584523.5	22095402.9	1165645.7		
	3	21496904.0	21035851.0	22799952.0	21777569.0	914927.7		
1 hr	1	9667019.5	10910749.5	10895303.2	10491024.1	713650.7	19418768.4	5951829.6
	2	26172635.0	24149804.2	25209418.2	25177285.8	1011798.2		
	3	23226380.0	20574263.3	23963343.0	22587995.4	1782446.7		
2 hr	1	11348097.8	11537082.8	11593910.8	11493030.5	128691.4	19499104.4	5475921.5
	2	24300999.5	25917380.5	24695930.2	24971436.7	842674.2		
	3	18875679.3	23413825.7	23809033.3	22032846.1	2741317.9		
4 hr	1	12510770.5	12051206.5	11864812.2	12142263.1	332466.6	21580466.3	6292135.5
	2	26812450.3	26232091.3	29181422.3	27408654.7	1562444.6		
	3	24549207.7	26181068.0	24841168.0	25190481.2	870205.1		
6 hr	1	10591288.0	10426924.7	9853200.0	10290470.9	387502.5	20989324.1	7132568.8
	2	29771388.0	29980437.0	30703271.7	30151698.9	488978.3		
	3	21548339.0	21895102.7	24133966.3	22525802.7	1403461.5		
8 hr	1	9688488.0	10764851.0	9346467.0	9933268.7	740196.9	21400306.7	7644692.0
	2	29118077.0	31543805.7	31121479.0	30594453.9	1295899.9		
	3	22911251.0	23297957.7	24810383.7	23673197.4	1003633.3		
16 hr	1	10999158.7	10487104.7	10776834.7	10754366.0	256765.4	20111423.1	6238038.1
	2	25894825.0	27553709.7	24664644.7	26037726.4	1449824.0		
	3	23424593.0	23539252.3	23662685.3	23542176.9	119073.1		

c. LucF/ LucR ratio in untreated condition

Time	Experiment	A	B	C	Mean	SD	Mean	SD	Mean	SD
0 hr	1	0.065	0.068	0.064	0.066	0.002	0.055	0.012	5.514	1.191
	2	0.045	0.047	0.041	0.044	0.003				
	3	0.068	0.064	0.070	0.067	0.003				
30 min	1	0.062	0.063	0.067	0.064	0.003	0.054	0.011	5.441	1.109
	2	0.045	0.047	0.041	0.045	0.003				
	3	0.070	0.068	0.070	0.069	0.001				
1 hr	1	0.062	0.065	0.061	0.063	0.002	0.055	0.009	5.492	0.928
	2	0.054	0.042	0.046	0.047	0.006				
	3	0.069	0.069	0.071	0.070	0.001				
2 hr	1	0.064	0.063	0.062	0.063	0.001	0.057	0.008	5.693	0.792
	2	0.046	0.049	0.057	0.051	0.006				
	3	0.072	0.070	0.068	0.070	0.002				
4 hr	1	0.065	0.058	0.065	0.062	0.004	0.061	0.004	6.113	0.365
	2	0.063	0.057	0.059	0.060	0.003				
	3	0.072	0.068	0.070	0.070	0.002				
6 hr	1	0.053	0.048	0.048	0.050	0.003	0.055	0.006	5.452	0.557
	2	0.059	0.059	0.059	0.059	0.000				
	3	0.066	0.062	0.064	0.064	0.002				
8 hr	1	0.050	0.047	0.050	0.049	0.002	0.055	0.007	5.535	0.708
	2	0.063	0.061	0.060	0.062	0.002				
	3	0.059	0.060	0.063	0.061	0.002				
16 hr	1	0.047	0.054	0.053	0.051	0.004	0.054	0.005	5.388	0.524
	2	0.062	0.058	0.050	0.056	0.006				
	3	0.060	0.060	0.055	0.058	0.003				

d. LucF activity in tunicamycin-treated condition

Time	Experiment	A	B	C	Mean	SD	Mean	SD
0 hr	1	601244.2	534885.5	549595.8	561908.5	34850.7	992859.8	316484.1
	2	1025826.8	1044155.5	861535.5	977172.6	100563.1		
	3	1443391.2	1377012.2	1498091.8	1439498.4	60633.6		
30 min	1	577832.2	629007.0	585059.2	597299.4	27696.3	1052039.6	337038.8
	2	1264769.8	899585.5	1071991.8	1078782.4	182686.8		
	3	1405970.8	1458138.5	1576001.8	1480037.1	87105.1		
1 hr	1	622262.0	630447.2	612729.5	621812.9	8867.4	1091969.3	325608.7
	2	1270410.5	1037199.2	1262080.5	1189896.7	132305.5		
	3	1397949.0	1518652.8	1475992.8	1464198.2	61210.2		
2 hr	1	481132.0	506849.7	470922.7	486301.4	18513.0	1152579.0	444185.0
	2	1298972.2	1473610.2	1339992.5	1370858.3	91318.8		
	3	1508018.2	1692219.8	1601493.8	1600577.3	92104.3		
4 hr	1	790249.8	602737.5	595327.8	662771.7	110461.4	1377179.3	476271.7
	2	1728486.0	1659576.0	1681873.7	1689978.6	35162.7		
	3	1800019.5	1799203.2	1737139.8	1778787.5	36070.2		
6 hr	1	498812.3	441356.3	490051.0	476739.9	30954.6	1270003.1	528842.2
	2	1700196.3	1860079.3	2047234.7	1869170.1	173697.7		
	3	1457490.7	1421321.7	1513486.0	1464099.4	46436.2		
8 hr	1	425337.7	393006.7	373172.3	397172.2	26331.0	1192632.9	534336.3
	2	1707848.0	1912179.0	1805489.0	1808505.3	102198.9		
	3	1174501.3	1483493.3	1458668.3	1372221.0	171679.6		
16 hr	1	522393.2	484535.5	442786.5	483238.4	39819.2	691050.3	145727.6
	2	918053.8	830863.8	923647.5	890855.1	52029.1		
	3	658711.7	712375.0	726085.7	699057.4	35606.6		

e. LucR activity in tunicamycin-treated condition

Time	Experiment	A	B	C	Mean	SD	Mean	SD
0 hr	1	9185735.8	7879593.5	8580291.2	8548540.2	653649.8	17289148.6	5827072.3
	2	22667079.5	22121995.5	21020088.8	21936387.9	839036.5		
	3	21356100.7	21408528.5	21382924.0	21382517.7	26216.3		
30 min	1	9922533.8	10229378.5	10424279.5	10192063.9	252945.6	18872204.1	5786760.1
	2	25970134.8	22263989.5	24831936.2	24355353.5	1898480.1		
	3	21211819.7	21432298.5	23563466.3	22069194.8	1298764.1		
1 hr	1	10819362.5	11192227.2	11186717.2	11066102.3	213700.7	19625564.4	5706308.1
	2	25291560.5	25297793.8	25526334.5	25371896.3	133783.7		
	3	22045784.5	22469365.0	22800934.3	22438694.6	378508.0		
2 hr	1	10672629.3	9425847.3	8631733.3	9576736.7	1028780.7	18597035.7	6013532.7
	2	25404842.2	25943573.8	24164444.5	25170953.5	912333.9		
	3	18946629.0	22767159.3	21416462.7	21043417.0	1937391.4		
4 hr	1	9157618.2	8874163.2	8352043.5	8794608.3	408637.2	16568256.2	5182431.9
	2	22566264.0	21722719.3	22465246.3	22251409.9	460637.0		
	3	19302674.7	19236560.3	17437016.0	18658750.3	1058569.3		
6 hr	1	5707557.7	6468723.3	6793851.3	6323377.4	557541.5	13643456.2	4880052.5
	2	18797739.3	19533741.3	22025645.7	20119042.1	1691678.9		
	3	14580117.7	14335709.3	14548020.3	14487949.1	132816.7		
8 hr	1	4929376.3	4938396.0	4512184.3	4793318.9	243511.4	11156299.3	4385073.4
	2	15530515.3	18023923.0	17064235.7	16872891.3	1257668.5		
	3	10512410.0	12480250.0	12415403.0	11802687.7	1117883.5		
16 hr	1	3249819.8	3223857.8	2744256.2	3072644.6	284688.8	4561899.3	992836.5
	2	5896815.2	5583069.5	5932838.5	5804241.1	192385.2		
	3	4691651.3	4763560.7	4971224.7	4808812.2	145176.1		

f. LucF/ LucR ratio in tunicamycin-treated condition

Time	Experiment	A	B	C	Mean	SD	Mean	SD	Mean	SD
0 hr	1	0.065	0.068	0.064	0.066	0.002	0.055	0.012	5.514	1.191
	2	0.045	0.047	0.041	0.044	0.003				
	3	0.068	0.064	0.070	0.067	0.003				
30 min	1	0.058	0.061	0.056	0.059	0.003	0.051	0.009	5.135	0.856
	2	0.049	0.040	0.043	0.044	0.004				
	3	0.066	0.068	0.067	0.067	0.001				
1 hr	1	0.058	0.056	0.055	0.056	0.001	0.052	0.006	5.155	0.610
	2	0.050	0.041	0.049	0.047	0.005				
	3	0.063	0.068	0.065	0.065	0.002				
2 hr	1	0.045	0.054	0.055	0.051	0.005	0.053	0.004	5.280	0.423
	2	0.051	0.057	0.055	0.054	0.003				
	3	0.080	0.074	0.075	0.076	0.003				
4 hr	1	0.086	0.068	0.071	0.075	0.010	0.076	0.006	7.556	0.623
	2	0.077	0.076	0.075	0.076	0.001				
	3	0.093	0.094	0.100	0.095	0.004				
6 hr	1	0.087	0.068	0.072	0.076	0.010	0.084	0.011	8.440	1.138
	2	0.090	0.095	0.093	0.093	0.002				
	3	0.100	0.099	0.104	0.101	0.003				
8 hr	1	0.086	0.080	0.083	0.083	0.003	0.095	0.014	9.507	1.363
	2	0.110	0.106	0.106	0.107	0.002				
	3	0.112	0.119	0.117	0.116	0.004				
16 h	1	0.161	0.150	0.161	0.157	0.006	0.155	0.005	15.543	0.517

Table S7. Kinetics of IGF1R IRES activity

Cardiomyocytes AC16 transduced with the bicistronic lentivector with the IGF1R IRES were submitted to tunicamycin treatment and the time-course of IGF1R IRES activity (0 hr, 30 min, 1 hr, 2 hr, 4 hr, 6 hr, 8 hr, 16 hr) was evaluated by measuring Firefly/Renilla ratio. Experiments were performed three times with 3 biological replicates (n=9) and each time point was compared to 0 hr time point with a non parametric Mann-Whitney test (Fig. S1).