AID 644

Source (MLSCN Center Name): The Scripps Research Institute Molecular Screening Center  
Center Affiliation: The Scripps Research Institute, TSRI  
Assay Provider: Scripps Florida  
Network: Molecular Library Screening Center Network (MLSCN)  
Proposal Number: None  
  
External Assay ID: Rock2\_INH\_ LUMI\_1536\_ IC50  
  
Name:  
  
Dose-response biochemical assay of inhibitors of Rho kinase 2 (Rock2)   
  
Description:  
  
Rho-Kinase is a serine/threonine kinase involved in the regulation of smooth muscle contraction and cytoskeletal reorganization of nonmuscle cells (1). Its inhibition is known to promote the smooth muscle relaxation. Thus, small-molecule inhibitors of Rho-Kinase may be effective probes for treatment of cerebral vasospasm (2) and potentially effective for treatment of angina (3), hypertension (4), arteriosclerosis (5), and erectile dysfunction (6).

**Sequence:** [Rho-associated, coiled-coil containing protein kinase 2 [Homo sapiens]](http://www.ncbi.nlm.nih.gov/sites/entrez?db=protein&cmd=search&term=41872583)  
**Protein Family:** [Catalytic domain of the Protein Serine/Threonine Kinase, Rho-associated coiled-coil containing protein kinase](http://www.ncbi.nlm.nih.gov/Structure/cdd/wrpsb.cgi?INPUT_TYPE=precalc&SEQUENCE=41872583)  
  
[Gene:ROCK2](http://www.ncbi.nlm.nih.gov/gene/9475) [Related Protein 3D Structures](http://structure.ncbi.nlm.nih.gov/Structure/cblast/cblast.cgi?client=entrez&query_gi=41872583)

Keywords:  
  
Rock2, Rhok2, kinase, Rho kinase 2, ROCK II, luciferase, luminescence, angina, hypertension, vasospasm, arteriosclerosis, erectile dysfunction, Scripps, titration, IC50, dose response, inhibition assay, Rho-associated coiled-coil-containing protein serine/threonine kinase II

**Protocol:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#aProtocol', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=644&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=644&loc=ea_ras#top)

Assay Overview:   
Compounds identified from a previously described set of experiments entitled "Primary high-throughput assay for chemical inhibitors of Rho kinase 2 (Rhok2) activity" (PubChem AID = 604) were selected for testing in this assay. Out of 212 compounds identified during the primary screen, 206 compounds were assessed in this dose response experiment. Each compound was assayed in 10 point, 1:3 serial dilutions starting at a nominal test concentration of 60 micromolar.  
  
As with the primary screen, the assay is based on ability of Rhok2 to phosphorylate a specific peptide sequence derived from its substrate - ribosomal protein S6 (amino acid residues 229-239). Rhok2 uses ATP as a donor of phosphate for the phosphorylation of the substrate, which leads to the depletion of ATP in the reaction mix. An assay kit (#Kinase-Glo#, Promega) was used to quantify enzyme activity. Using this kit, residual amounts of ATP are measured by a secondary enzymatic reaction, through which luciferase utilizes the remaining ATP to produce luminescence. Luminescent signal is directly proportional to ATP concentration and inversely proportional to Rhok2 activity.   
  
This dose response assay was conducted in 1536 well plate format. Each concentration was tested nominally in triplicate.  
  
Protocol Summary:  
1.25 microliters of solution containing 20 micromolar ATP and 20 micromolar S6 peptide (substrate) in assay buffer (50 millimolar HEPES pH 7.3, 10 millimolar MgCl2, 0.1% BSA, 2 millimolar DTT) were dispensed in 1536 microtiter plate. 15 nanoliters of test compound or positive and negative control (2.12 millimolar Y-27632 and DMSO, respectively) were then added to the appropriate wells. Each compound dilution was assayed in triplicate, for a nominal total of 30 data points per dose response curve. The enzymatic reaction was initiated by dispensing 1.25 microliters of 8 nanomolar Rhok2 solution in assay buffer (50 millimolar HEPES pH 7.3, 10 millimolar MgCl2, 0.1% BSA, 2 millimolar DTT). After 2 hours of incubation at 25 degrees Celsius, 2.5 microliters of Kinase Glo reagent (Promega Corporation, Madison, WI) was added to each well. Plates were incubated for 10 minutes and luminescence was read on Perkin-Elmer Viewlux for 60 seconds.   
  
Each compound was tested in triplicate. The percent inhibition for each well has been calculated as follows:  
%inhibition = (test\_compound - median\_ negative\_control)/(median\_positive\_control - median\_negative\_control)\*100  
where the positive control is Y-27632 (13 micromolar) and negative control is DMSO only.  
  
For each compound, percentage inhibitions were plotted against compound concentration. A four parameter equation describing a sigmoidal dose-response curve was then fitted with adjustable baseline using Assay Explorer software (MDL Information Systems). The reported IC50 values were generated from fitted curves by solving for X-intercept at the 50% inhibition level of Y-intercept.In cases where the highest concentration tested (i.e. 60 micromolar) did not result in greater than 50% inhibition, the IC50 was determined manually as greater than 60 micromolar.   
  
Compounds with IC50 values of greater than 10 micromolar were considered inactive, compounds with IC50 equal or less than 10 micromolar are considered active.  
  
The activity score was calculated based on pIC50 values for compounds for which an exact IC50 value was calculated and based on the observed pIC50 range, specifically the maximum lower limit of the pIC50 value as calculated from the lowest concentration for which greater than 50% inhibition is observed. This results in a conservative estimate of the activity score for compounds for which no exact IC50 value is given while maintaining a reasonable rank order of all compounds tested.

http://pubchem.ncbi.nlm.nih.gov/images/pcbioassay.gif**Comment:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#aComment', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=644&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=644&loc=ea_ras" \l "top)

All data reported were normalized on a per-plate basis.  
Possible artifacts of this assay can include, but are not limited to: agents that quench luminescence, compounds that inhibit luciferase activity.

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| --- | --- | --- | --- | --- | --- | --- |
| **TID</B?< span>** | **Name** | **Description** |  | **Histogram** | **Type** | **Unit** |
|  | Outcome | The BioAssay activity outcome |  |  | Outcome |  |
|  | Score | The BioAssay activity ranking score |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Integer |  |
| 1 | Activity Qualifier | Activity Qualifier identifies if the resultant data IC50 came from a fitted curve or was determined manually to be less than or greater than its listed IC50 concentration |  |  | String |  |
| 2 | IC50 | Qualified IC50 in molar: The concentration at which 50% of the inhibition is observed (relative to 100% inhibition of 13 micromolar reference inhibitor) |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | μM |
| 3 | LogIC50 | Log10 of the qualified IC50 in M concentration. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 4 | Hill Coefficient | The variable HillSlope describes the steepness of the curve. This variable is called the Hill slope, the slope factor, or the Hill coefficient. If it is positive, the curve increases as X increases. If it is negative, the curve decreases as X increases. A standard sigmoid dose-response curve (previous equation) has a Hill Slope of 1.0. When HillSlope is less than 1.0, the curve is more shallow. When HillSlope is greater than 1.0, the curve is steeper. The Hill slope has no units. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 5 | Hill S0 | Y-min of the curve. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 6 | Hill Sinf | Y-max of the curve. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 7 | Hill dS | The range of Y. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 8 | Chi Square | A measure for the 'goodness' of a fit. The chi-square test (Snedecor and Cochran, 1989) is used to test if a sample of data came from a population with a specific distribution. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 9 | Rsquare | This value indicates how successful the fit explains the variation of the data; R-square is the square of the correlation between the response values and the predicted response values. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 10 | Excluded Points | Number of excluded point in the dose-response curve (counting one data point per concentration). |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Integer |  |
| 11 | Number of DataPoints | Overall number of data points of normalized percent inhibition that was used for calculations (includes all concentration points); in some cases a data point can be excluded as an outlier. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Integer |  |
| 12 | Inhibition at 3.0 nM | Normalized percent inhibition at 3.0 nanomolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 13 | Inhibition at 9.1 nM | Normalized percent inhibition at 9.1 nanomolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 14 | Inhibition at 27.3 nM | Normalized percent inhibition at 27.3 nanomolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 15 | Inhibition at 81.8 nM | Normalized percent inhibition at 81.8 nanomolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 16 | Inhibition at 245.4 nM | Normalized percent inhibition at 245.4 nanomolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 17 | Inhibition at 0.7 uM | Normalized percent inhibition at 0.7 micromolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 18 | Inhibition at 2.2 uM | Normalized percent inhibition at 2.2 micromolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 19 | Inhibition at 6.6 uM | Normalized percent inhibition at 6.6 micromolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 20 | Inhibition at 19.9 uM | Normalized percent inhibition at 19.9 micromolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 21 | Inhibition at 59.6 uM | Normalized percent inhibition at 59.6 micromolar inhibitor concentration; average of triplicate measurement. |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Structure** | [SID](javascript:resortassay('sid');) | [CID](javascript:resortassay('cid');) | [Score](javascript:resortassay('rank1');) | Outcome | Links | [Activity Qualifier](javascript:resortassay('7425');) | | [IC50 [μM]](javascript:resortassay('7426');) | | [LogIC50](javascript:resortassay('7427');) | [Hill Coefficient](javascript:resortassay('7428');) | | | [Hill S0](javascript:resortassay('7429');) | [Hill Sinf](javascript:resortassay('7430');) | [Hill dS](javascript:resortassay('7431');) | | | [Chi Square](javascript:resortassay('7432');) | | [Rsquare](javascript:resortassay('7433');) | [Excluded Points](javascript:resortassay('7434');) | | [Number of DataPoints](javascript:resortassay('7435');) | | [Inhibition at 3.0 nM [%]](javascript:resortassay('7436');) | | [Inhibition at 9.1 nM [%]](javascript:resortassay('7437');) | | [Inhibition at 27.3 nM [%]](javascript:resortassay('7438');) | | [Inhibition at 81.8 nM [%]](javascript:resortassay('7439');) | | [Inhibition at 245.4 nM [%]](javascript:resortassay('7440');) | | [Inhibition at 0.7 uM [%]](javascript:resortassay('7441');) | | [Inhibition at 2.2 uM [%]](javascript:resortassay('7442');) | | [Inhibition at 6.6 uM [%]](javascript:resortassay('7443');) | | [Inhibition at 19.9 uM [%]](javascript:resortassay('7444');) | | [Inhibition at 59.6 uM [%]](javascript:resortassay('7445');) | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7970106](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7970106&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7970106](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7970106) | [5056270](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5056270) | 100 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | < | 0.00303 | | -8.52 | | |  |  | |  | |  |  | |  | | | 0 | | 30 | | 80.2 | | 89.4 | | 100.7 | | 110.6 | | 115.2 | | 113.7 | | 113.8 | | 112 | | 110.4 | | 108.3 |
| 2 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=855669](javascript:%20void%20window.open('../image/structurefly.cgi?sid=855669&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [855669](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=855669) | [163751](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=163751) | 75 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.071 | | -7.15 | | | 1.14 |  | |  | |  | 4.49 | | 1 | | | 0 | | 30 | | 17.5 | | 24.8 | | 34 | | 50.9 | | 80.9 | | 95.5 | | 102.7 | | 104.5 | | 104.8 | | 104.4 |
| 3 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4257793](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4257793&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4257793](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4257793) | [1246120](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1246120) | 74 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.08 | | -7.1 | | | 0.81 |  | |  | |  | 9.06 | | 1 | | | 0 | | 30 | | 10.2 | | 17.3 | | 27.7 | | 50.9 | | 77 | | 96.1 | | 108.9 | | 116.1 | | 117.7 | | 121.2 |
| 4 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=855933](javascript:%20void%20window.open('../image/structurefly.cgi?sid=855933&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [855933](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=855933) | [3542](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=3542) | 72 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.1 | | -7 | | | 0.84 |  | |  | |  | 1.13 | | 1 | | | 0 | | 30 | | 15.6 | | 19.2 | | 29 | | 46.5 | | 66.9 | | 85.9 | | 92.2 | | 99.7 | | 102.5 | | 102.9 |
| 5 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=843930](javascript:%20void%20window.open('../image/structurefly.cgi?sid=843930&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [843930](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=843930) | [646236](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=646236) | 64 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.267 | | -6.57 | | | 0.88 |  | |  | |  | 6.66 | | 1 | | | 0 | | 30 | | 14.6 | | 17.6 | | 20.4 | | 29.6 | | 49.3 | | 70.9 | | 87.3 | | 98.6 | | 103.4 | | 105.4 |
| 6 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=850647](javascript:%20void%20window.open('../image/structurefly.cgi?sid=850647&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [850647](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=850647) | [653177](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=653177) | 61 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.415 | | -6.38 | | | 1.01 |  | |  | |  | 4.87 | | 1 | | | 0 | | 30 | | 15.3 | | 15.6 | | 20.2 | | 26.3 | | 39.6 | | 62.9 | | 82.9 | | 103.2 | | 106.1 | | 101.9 |
| 7 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=857157](javascript:%20void%20window.open('../image/structurefly.cgi?sid=857157&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [857157](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=857157) | [658506](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=658506) | 60 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.464 | | -6.33 | | | 0.93 |  | |  | |  | 12.28 | | 1 | | | 0 | | 30 | | 7 | | 9.7 | | 13 | | 24.8 | | 34.6 | | 60.2 | | 84.4 | | 101.8 | | 112.9 | | 104.8 |
| 8 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=844493](javascript:%20void%20window.open('../image/structurefly.cgi?sid=844493&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [844493](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=844493) | [646821](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=646821) | 57 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.661 | | -6.18 | | | 0.79 |  | |  | |  | 25.33 | | 0.99 | | | 0 | | 30 | | 12.6 | | 14 | | 16.9 | | 21.9 | | 36.9 | | 51.6 | | 67.6 | | 85.7 | | 94.4 | | 93.6 |
| 9 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7978068](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7978068&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7978068](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7978068) | [579342](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=579342) | 56 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.807 | | -6.09 | | | 0.76 |  | |  | |  | 10.41 | | 1 | | | 0 | | 30 | | 6.4 | | 8.3 | | 12.3 | | 19.1 | | 29.3 | | 46.8 | | 71.9 | | 91.3 | | 108.5 | | 111.3 |
| 10 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=852914](javascript:%20void%20window.open('../image/structurefly.cgi?sid=852914&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [852914](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=852914) | [644354](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=644354) | 56 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.8 | | -6.1 | | | 0.7 |  | |  | |  | 7.21 | | 1 | | | 0 | | 30 | | 14.9 | | 16.6 | | 20.3 | | 25.3 | | 34.7 | | 46.7 | | 68.9 | | 85.1 | | 102.7 | | 107.6 |
| 11 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=845954](javascript:%20void%20window.open('../image/structurefly.cgi?sid=845954&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [845954](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=845954) | [648322](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=648322) | 56 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 0.765 | | -6.12 | | | 0.77 |  | |  | |  | 13.15 | | 1 | | | 0 | | 30 | | 2.8 | | 3.1 | | 7.2 | | 12.8 | | 26.6 | | 52.4 | | 72.2 | | 88.9 | | 98.4 | | 109.5 |
| 12 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4260348](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4260348&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4260348](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4260348) | [1245524](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1245524) | 53 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.132 | | -5.95 | | | 0.8 |  | |  | |  | 6.95 | | 1 | | | 0 | | 30 | | 12.8 | | 14 | | 16.6 | | 19 | | 28.8 | | 43.1 | | 60.6 | | 82.2 | | 96 | | 100 |
| 13 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7971315](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7971315&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7971315](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7971315) | [756689](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=756689) | 51 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.489 | | -5.83 | | | 0.85 |  | |  | |  | 10.28 | | 1 | | | 0 | | 30 | | 4.4 | | 7.2 | | 10.3 | | 13.9 | | 19.6 | | 35.9 | | 57.5 | | 84.6 | | 102.3 | | 109.2 |
| 14 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7969955](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7969955&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7969955](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7969955) | [756688](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=756688) | 51 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.382 | | -5.86 | | | 0.73 |  | |  | |  | 4.5 | | 1 | | | 0 | | 30 | | 3.4 | | 5.2 | | 9.2 | | 13.2 | | 21.3 | | 38.8 | | 58.2 | | 82.6 | | 98.9 | | 107.6 |
| 15 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7969667](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7969667&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7969667](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7969667) | [3129049](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=3129049) | 51 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.395 | | -5.86 | | | 0.79 |  | |  | |  | 15.5 | | 1 | | | 0 | | 30 | | 3.7 | | 5.4 | | 8.2 | | 11.5 | | 18.9 | | 37 | | 61.5 | | 84.9 | | 101.9 | | 114 |
| 16 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=3717731](javascript:%20void%20window.open('../image/structurefly.cgi?sid=3717731&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [3717731](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=3717731) | [2091316](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2091316) | 51 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.517 | | -5.82 | | | 0.84 |  | |  | |  | 29.6 | | 0.99 | | | 0 | | 30 | | 13.3 | | 14.2 | | 15 | | 16.5 | | 25.5 | | 37.8 | | 56.5 | | 79.8 | | 96.5 | | 104.1 |
| 17 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7965051](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7965051&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7965051](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7965051) | [5307388](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5307388) | 50 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.733 | | -5.76 | | | 1.14 |  | |  | |  | 12.72 | | 1 | | | 0 | | 30 | | 16.8 | | 17.3 | | 18.7 | | 21.3 | | 25 | | 35.2 | | 52.3 | | 86.8 | | 99.8 | | 107.7 |
| 18 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7974676](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7974676&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7974676](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7974676) | [870804](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=870804) | 49 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.798 | | -5.75 | | | 0.87 |  | |  | |  | 9.25 | | 1 | | | 0 | | 30 | | 14.4 | | 13.6 | | 15.6 | | 17.1 | | 22.7 | | 33.3 | | 55.4 | | 77.4 | | 90.9 | | 104.2 |
| 19 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7973485](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7973485&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7973485](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7973485) | [676266](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=676266) | 49 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.914 | | -5.72 | | | 0.75 |  | |  | |  | 3.61 | | 1 | | | 0 | | 30 | | 6.5 | | 9.3 | | 11.1 | | 13.3 | | 21.9 | | 32.3 | | 53 | | 74.8 | | 97.4 | | 107.2 |
| 20 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7976977](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7976977&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7976977](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7976977) | [1316845](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1316845) | 48 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.204 | | -5.66 | | | 0.97 |  | |  | |  | 11.46 | | 1 | | | 0 | | 30 | | 16.5 | | 17 | | 17.1 | | 19.1 | | 22.5 | | 31.2 | | 51.1 | | 72.8 | | 96.3 | | 103.7 |
| 21 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7971472](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7971472&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7971472](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7971472) | [2155061](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2155061) | 48 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.195 | | -5.66 | | | 0.78 |  | |  | |  | 7.94 | | 1 | | | 0 | | 30 | | 4.7 | | 6.2 | | 8.2 | | 11.1 | | 16.6 | | 29.8 | | 50.8 | | 72.3 | | 96.8 | | 106 |
| 22 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4259698](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4259698&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4259698](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4259698) | [2969827](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2969827) | 48 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.989 | | -5.7 | | | 1.05 |  | |  | |  | 9.23 | | 1 | | | 0 | | 30 | | -13.4 | | -11.6 | | -9 | | -4.7 | | 0.5 | | 29.1 | | 52.1 | | 67.4 | | 77.4 | | 80.1 |
| 23 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4255366](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4255366&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4255366](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4255366) | [851257](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=851257) | 48 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 1.994 | | -5.7 | | | 0.69 |  | |  | |  | -0.11 | | 1 | | | 0 | | 30 | | -7 | | -6.4 | | -3.2 | | 3.6 | | 14.7 | | 33.5 | | 53.7 | | 66.1 | | 78.3 | | 87.5 |
| 24 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7977171](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7977171&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7977171](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7977171) | [2883004](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2883004) | 47 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.371 | | -5.63 | | | 0.84 |  | |  | |  | 41.71 | | 0.99 | | | 0 | | 30 | | 7.6 | | 8.6 | | 8.8 | | 10.9 | | 19.8 | | 29.4 | | 49.9 | | 66.3 | | 80.9 | | 87 |
| 25 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7971820](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7971820&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7971820](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7971820) | [2155099](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2155099) | 47 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.299 | | -5.64 | | | 0.72 |  | |  | |  | 8.02 | | 1 | | | 0 | | 30 | | 5.6 | | 8.6 | | 10.9 | | 15.1 | | 18.4 | | 31.6 | | 48 | | 71.4 | | 94.6 | | 106.4 |
| 26 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4264846](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4264846&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4264846](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4264846) | [820817](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=820817) | 47 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.415 | | -5.62 | | | 0.74 |  | |  | |  | 622.82 | | 0.99 | | | 0 | | 30 | | 0.2 | | 1.4 | | 3.6 | | 7.2 | | 18.9 | | 31 | | 49 | | 62.8 | | 74.3 | | 78.3 |
| 27 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4264171](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4264171&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4264171](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4264171) | [973172](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=973172) | 47 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.314 | | -5.64 | | | 0.78 |  | |  | |  | 9.21 | | 1 | | | 0 | | 30 | | 16.8 | | 16.8 | | 17.5 | | 20.4 | | 23.6 | | 34.7 | | 50.6 | | 65 | | 90.9 | | 97.4 |
| 28 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4245982](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4245982&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4245982](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4245982) | [3240382](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=3240382) | 47 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.301 | | -5.64 | | | 0.77 |  | |  | |  | 57.47 | | 0.99 | | | 0 | | 30 | | 2.1 | | 4.4 | | 7.2 | | 8.8 | | 16.7 | | 26.1 | | 50.9 | | 73.9 | | 84.2 | | 101.9 |
| 29 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4244225](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4244225&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4244225](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4244225) | [2761023](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2761023) | 47 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.527 | | -5.6 | | | 0.74 |  | |  | |  | 4.64 | | 1 | | | 0 | | 30 | | 13.4 | | 13.1 | | 14.5 | | 17.9 | | 22.7 | | 32.2 | | 47.7 | | 66.2 | | 83.5 | | 93.9 |
| 30 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4242836](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4242836&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4242836](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4242836) | [756696](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=756696) | 46 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 2.706 | | -5.57 | | | 0.64 |  | |  | |  | 32.24 | | 0.99 | | | 0 | | 30 | | 4.5 | | 6.6 | | 9.1 | | 11.2 | | 17.1 | | 28.4 | | 48.6 | | 66.2 | | 90.4 | | 107.7 |
| 31 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7970469](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7970469&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7970469](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7970469) | [756700](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=756700) | 44 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 3.325 | | -5.48 | | | 0.89 |  | |  | |  | 4.93 | | 1 | | | 0 | | 30 | | 5.1 | | 6.2 | | 6.9 | | 10.3 | | 12.9 | | 23.9 | | 38.8 | | 67.1 | | 92 | | 104.9 |
| 32 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4262721](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4262721&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4262721](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4262721) | [717087](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=717087) | 44 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 3.305 | | -5.48 | | | 0.73 |  | |  | |  | 17.92 | | 1 | | | 0 | | 30 | | 5 | | 6.1 | | 9.5 | | 12.4 | | 15.5 | | 25.9 | | 39.7 | | 66.5 | | 90.6 | | 108.8 |
| 33 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=844679](javascript:%20void%20window.open('../image/structurefly.cgi?sid=844679&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [844679](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=844679) | [647010](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=647010) | 44 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 3.52 | | -5.45 | | | 0.87 |  | |  | |  | 10.09 | | 1 | | | 0 | | 30 | | 13 | | 14.4 | | 15.6 | | 16.5 | | 20.3 | | 28.8 | | 41.4 | | 59.1 | | 90.2 | | 97.9 |
| 34 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4260761](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4260761&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4260761](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4260761) | [948017](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=948017) | 43 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 3.799 | | -5.42 | | | 0.87 |  | |  | |  | 6.35 | | 1 | | | 0 | | 30 | | 12.7 | | 14.1 | | 15.9 | | 15.6 | | 18.1 | | 26.5 | | 40.1 | | 61.2 | | 82.3 | | 96.4 |
| 35 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=7976469](javascript:%20void%20window.open('../image/structurefly.cgi?sid=7976469&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [7976469](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=7976469) | [5310834](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5310834) | 42 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 4.807 | | -5.32 | | | 0.67 |  | |  | |  | 30.81 | | 1 | | | 0 | | 30 | | 1.2 | | 2.3 | | 4.5 | | 6.7 | | 10.9 | | 18.9 | | 36.5 | | 56.3 | | 80.7 | | 101.3 |
| 36 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4264645](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4264645&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4264645](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4264645) | [2856664](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2856664) | 42 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 4.813 | | -5.32 | | | 0.61 |  | |  | |  | 5.98 | | 1 | | | 0 | | 30 | | 12.9 | | 13.2 | | 13 | | 16 | | 19.5 | | 26.9 | | 39 | | 56 | | 74.9 | | 96.4 |
| 37 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4265686](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4265686&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4265686](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4265686) | [2901964](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2901964) | 41 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 5.243 | | -5.28 | | | 0.83 |  | |  | |  | 105.02 | | 0.99 | | | 0 | | 30 | | -0.5 | | 1.3 | | 1.7 | | 3.7 | | 6.6 | | 16.3 | | 29.6 | | 56.2 | | 81.9 | | 100.3 |
| 38 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4257150](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4257150&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4257150](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4257150) | [1245776](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1245776) | 41 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 5.185 | | -5.29 | | | 0.7 |  | |  | |  | 10.46 | | 1 | | | 0 | | 30 | | 4.6 | | 8.2 | | 9.3 | | 11.6 | | 13.8 | | 22.6 | | 34.3 | | 54.7 | | 77.2 | | 94.3 |
| 39 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=4255222](javascript:%20void%20window.open('../image/structurefly.cgi?sid=4255222&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [4255222](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=4255222) | [1247272](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1247272) | 41 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 5.248 | | -5.28 | | | 0.43 |  | |  | |  | 28.57 | | 1 | | | 0 | | 30 | | 3.2 | | 5.9 | | 8.5 | | 10.5 | | 15.1 | | 21.5 | | 40.4 | | 54.8 | | 76.1 | | 108.5 |
| 40 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=3714088](javascript:%20void%20window.open('../image/structurefly.cgi?sid=3714088&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [3714088](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=3714088) | [2998662](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2998662) | 41 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active | = | 5.446 | | -5.26 | | | 0.76 |  | |  | |  | 8.31 | | 1 | | | 0 | | 30 | | 10.9 | | 11.5 | | 12.4 | | 13.6 | | 18.8 | | 24.4 | | 33.3 | | 53.8 | | 75.1 | | 90.5 |

AID 435005

**Name:** Luminescence Cell-Based Primary HTS to Identify Inhibitors of Beta Cell Apoptosis..  
**Data** [**Source**](http://pubchem.ncbi.nlm.nih.gov/sources/sources.cgi?mode=contact&dsn=Broad%20Institute)**:** Broad Institute (2061-01\_INHIBITORS\_SINGLE-POINT\_MLPCN-HTS)

**Description:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#aDescription', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=435005&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=435005&loc=ea_ras#top)

Keywords: cytokine-induced apoptosis, pancreatic beta cells, INS1E insulinoma cells, Type I diabetes  
  
Assay Overview: INS1E rat insulinoma cells are similar to pancreatic beta cells because they secrete insulin in response to glucose stimulation. In the primary assay, INS1E cells are treated with 3 cytokines (Interferon-gamma, Tumor necrosis factor-alpha and Interleukin 1-beta) and compounds for 48 hours. The combination of cytokines leads to apoptotic cell death. The level of cell death is inferred my measuring overall ATP levels with Promega's Cell Titer Glo.  
  
Expected Outcome:  
Cytokine induced apoptosis leads to cell death and thus, reduced ATP levels. Candidate compounds will prevent cell death and keep ATP levels elevated. ATP is measured with Cell Titer go (Promega) and so increased values are expected. A compound is scored as a hit when both replicates score as 74% activity or higher and has a minimum Z score of 3.

Protocol:  
Day 0: Collect cells and generate single cell suspension by trypsinization and passing through sterile 40 micron cell strainer (Falcon). Seed 8,000 cells/well of INS-1E rat beta-cell line in 30 uL media using white, opaque, bar coded, 384-well Corning 8867 plates; incubate at 37 degrees C overnight  
Day 1: Add 10 uL medium with cytokine cocktail to each well using the Combi. Pin transfer compounds to plates right after the addition of cyokines with 100 nL head and transfer 100 nL compound. Positive control added by double pinning plates.  
Day 3: Add 20 uL Cell titer-Glo reagent to plates.  
Agitate gently for 15 seconds to maximize cell lysis. Incubate 8 minutes.  
Use Envision to read plate luminescence with standard luminescence parameters.  
  
Cell carrying media:  
RPMI 1640, 10% heat-inactivated fetal calf serum, 1 mM sodium pyruvate, 50 uM 2-mercaptoethanol, 2 mM glutamine, 10 mM HEPES, 100 U/ml penicillin, and 100 ug/ml streptomycin  
  
Plating media:  
RPMI 1640 (phenol red free), 5% heat-inactivated fetal calf serum, 1 mM sodium pyruvate, 50 uM 2-mercaptoethanol, 2 mM glutamine, 10 mM HEPES, 100 U/ml penicillin, and 100 ug/ml streptomycin  
Cytokines: 10 ng/mL IL-1 beta (R&D Systems, 501-RL), 25 ng/mL TNF-alpha (R&D Systems, 410-MT), 50 ng/mL IFN-gamma (R&D 485-MI)

http://pubchem.ncbi.nlm.nih.gov/images/pcbioassay.gif**Comment:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#aComment', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=435005&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=435005&loc=ea_ras#top)

HTS Data Analysis  
  
Negative control wells (NC) and positive control wells (PC) were included on every plate.  
Active compounds result in increased readout signal.  
  
The raw signals of the plate wells were normalized using the 'Stimulators Minus Neutral Controls' method in Genedata Assay Analyzer (v7.0.3):  
The median raw signal of the intraplate NC wells was set to a normalized activity value of 0.  
The median raw signal of the intraplate PC wells was set to a normalized activity value of 100.  
Experimental wells were scaled to this range, giving an activity score as percent change in signal relative to the intraplate controls.  
  
The plate pattern correction algorithm 'Runwise Pattern (Multiplicative)' in Genedata (v7.0.3) was applied to the normalized plate data.  
  
The final PUBCHEM\_ACTIVITY\_SCORE was set as equal to the mean of the replicate percent activities.  
  
The PUBCHEM\_ACTIVITY\_OUTCOME class was assigned as described below, based on an activity threshold of 75%:  
  
Activity\_Outcome = 1 (inactive)  
Less than half of the replicates fell outside the threshold.  
  
Activity\_Outcome = 2 (active)  
All of the replicates fell outside the threshold,  
OR  
At least half of the replicates fell outside the threshold AND the PUBCHEM\_ACTIVITY\_SCORE fell outside the threshold.  
  
Activity\_Outcome = 3 (inconclusive)  
At least half of the replicates fell outside the threshold AND the PUBCHEM\_ACTIVITY\_SCORE did not fall outside the threshold.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TID</B?< span>** | **Name** | **Description** |  | **Histogram** | **Type** | **Unit** |
|  | Outcome | The BioAssay activity outcome |  |  | Outcome |  |
|  | Score | The BioAssay activity ranking score |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Integer |  |
| 1 | REPRODUCIBILITY\_COSINE\_TRANSFORM | A measure of how well the activity reproduced across the two samples. Computed as the absolute value of the cosine between the "replicate vector" (ScoreA, ScoreB ---as well as ScoreC and/or ScoreD where applicable) and the vector (1, 1) representing perfect reproducibility. NULL will appear in this column if a sample was not run in duplicate or if the data produced by one of the replicates was Invalid |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float |  |
| 2 | BROAD\_SCREENING\_RUNIDS | This is a comma separated list of unique IDs given to each screening run at the Broad Institute. |  |  | String |  |
| 3 | REPLICATE\_A\_ACTIVITY\_SCORE | The calculated activity score for the indicated sample, a NULL here denotes data was not used or was not produced |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 4 | REPLICATE\_B\_ACTIVITY\_SCORE | The calculated activity score for the indicated sample, a NULL here denotes data was not used or was not produced |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 5 | REPLICATE\_C\_ACTIVITY\_SCORE | The calculated activity score for the indicated sample, a NULL here denotes data was not used or was not produced |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 6 | REPLICATE\_D\_ACTIVITY\_SCORE | The calculated activity score for the indicated sample, a NULL here denotes data was not used or was not produced |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | % |
| 7 | DATE\_REPORTED | The date the data was internally reported |  |  | String |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Structure** | [SID](javascript:resortassay('sid');) | [CID](javascript:resortassay('cid');) | [Score](javascript:resortassay('rank1');) | Outcome | Links | [REPRODUCIBILITY\_COSINE\_TRANSFORM](javascript:resortassay('2559080');) | [BROAD\_SCREENING\_RUNIDS](javascript:resortassay('2559081');) | [REPLICATE\_A\_ACTIVITY\_SCORE [%]](javascript:resortassay('2559082');) | [REPLICATE\_B\_ACTIVITY\_SCORE [%]](javascript:resortassay('2559083');) | [REPLICATE\_C\_ACTIVITY\_SCORE [%]](javascript:resortassay('2559084');) | [REPLICATE\_D\_ACTIVITY\_SCORE [%]](javascript:resortassay('2559085');) | [DATE\_REPORTED](javascript:resortassay('2559086');) |
|  | | | | | | | | | | | | | |
| 1 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=47198965](javascript:%20void%20window.open('../image/structurefly.cgi?sid=47198965&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [47198965](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=47198965) | [2981039](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2981039) | 238 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-09 | 235.316 | 240.279 |  |  | 2010-05-25 |
| 2 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=47198685](javascript:%20void%20window.open('../image/structurefly.cgi?sid=47198685&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [47198685](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=47198685) | [9585843](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=9585843) | 165 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 0.999 | 2061-01-A01-01-05 | 158.245 | 172.267 |  |  | 2010-05-25 |
| 3 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26661806](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26661806&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26661806](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26661806) | [1969953](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1969953) | 162 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-07 | 160.936 | 162.145 |  |  | 2010-05-25 |
| 4 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26660370](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26660370&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26660370](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26660370) | [2870838](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2870838) | 161 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-07 | 161.007 | 161.938 |  |  | 2010-05-25 |
| 5 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26664129](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26664129&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26664129](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26664129) | [1892755](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1892755) | 146 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-07 | 144.998 | 146.257 |  |  | 2010-05-25 |
| 6 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26671056](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26671056&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26671056](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26671056) | [764835](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=764835) | 142 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 144.459 | 139.197 |  |  | 2010-05-25 |
| 7 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=24799713](javascript:%20void%20window.open('../image/structurefly.cgi?sid=24799713&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [24799713](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=24799713) | [16191383](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=16191383) | 142 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 143.858 | 139.184 |  |  | 2010-05-25 |
| 8 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=22407848](javascript:%20void%20window.open('../image/structurefly.cgi?sid=22407848&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [22407848](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=22407848) | [2569039](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2569039) | 141 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 141.371 | 140.732 |  |  | 2010-05-25 |
| 9 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=49733087](javascript:%20void%20window.open('../image/structurefly.cgi?sid=49733087&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [49733087](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=49733087) | [3177911](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=3177911) | 140 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 140.038 | 140.045 |  |  | 2010-05-25 |
| 10 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=24811185](javascript:%20void%20window.open('../image/structurefly.cgi?sid=24811185&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [24811185](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=24811185) | [16193285](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=16193285) | 140 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 142.666 | 138.049 |  |  | 2010-05-25 |
| 11 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=24807149](javascript:%20void%20window.open('../image/structurefly.cgi?sid=24807149&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [24807149](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=24807149) | [1150834](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1150834) | 140 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 141.829 | 137.459 |  |  | 2010-05-25 |
| 12 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=49646700](javascript:%20void%20window.open('../image/structurefly.cgi?sid=49646700&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [49646700](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=49646700) | [16238264](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=16238264) | 139 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 139.151 | 139.288 |  |  | 2010-05-25 |
| 13 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=49646624](javascript:%20void%20window.open('../image/structurefly.cgi?sid=49646624&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [49646624](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=49646624) | [874744](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=874744) | 139 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 139.561 | 139.185 |  |  | 2010-05-25 |
| 14 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=47198640](javascript:%20void%20window.open('../image/structurefly.cgi?sid=47198640&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [47198640](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=47198640) | [743404](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=743404) | 139 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 0.999 | 2061-01-A01-01-05 | 131.969 | 145.222 |  |  | 2010-05-25 |
| 15 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=17433561](javascript:%20void%20window.open('../image/structurefly.cgi?sid=17433561&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [17433561](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=17433561) | [2183861](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2183861) | 139 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 140.838 | 137.747 |  |  | 2010-05-25 |
| 16 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=17416287](javascript:%20void%20window.open('../image/structurefly.cgi?sid=17416287&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [17416287](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=17416287) | [1941609](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1941609) | 139 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 138.932 | 139.816 |  |  | 2010-05-25 |
| 17 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=16952836](javascript:%20void%20window.open('../image/structurefly.cgi?sid=16952836&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [16952836](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=16952836) | [2303849](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=2303849) | 139 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 138.676 | 140.261 |  |  | 2010-05-25 |
| 18 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=24829363](javascript:%20void%20window.open('../image/structurefly.cgi?sid=24829363&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [24829363](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=24829363) | [16196147](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=16196147) | 138 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 139.902 | 135.282 |  |  | 2010-05-25 |
| 19 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=85147324](javascript:%20void%20window.open('../image/structurefly.cgi?sid=85147324&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [85147324](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=85147324) | [44143109](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=44143109) | 137 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 137.873 | 135.627 |  |  | 2010-05-25 |
| 20 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26725215](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26725215&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26725215](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26725215) | [442142](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=442142) | 136 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 138.509 | 133.547 |  |  |  |
| 21 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=24815907](javascript:%20void%20window.open('../image/structurefly.cgi?sid=24815907&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [24815907](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=24815907) | [16194784](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=16194784) | 136 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 134.819 | 137.289 |  |  | 2010-05-25 |
| 22 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=17414865](javascript:%20void%20window.open('../image/structurefly.cgi?sid=17414865&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [17414865](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=17414865) | [6897238](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=6897238) | 136 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 137.508 | 133.613 |  |  | 2010-05-25 |
| 23 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=85147332](javascript:%20void%20window.open('../image/structurefly.cgi?sid=85147332&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [85147332](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=85147332) | [44143117](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=44143117) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 135.984 | 134.155 |  |  | 2010-05-25 |
| 24 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=51089870](javascript:%20void%20window.open('../image/structurefly.cgi?sid=51089870&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [51089870](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=51089870) | [24892561](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=24892561) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 135.051 | 135.208 |  |  | 2010-05-25 |
| 25 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=51087935](javascript:%20void%20window.open('../image/structurefly.cgi?sid=51087935&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [51087935](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=51087935) | [5918115](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5918115) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 137.644 | 131.929 |  |  | 2010-05-25 |
| 26 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=51087912](javascript:%20void%20window.open('../image/structurefly.cgi?sid=51087912&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [51087912](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=51087912) | [10787985](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=10787985) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 134.002 | 135.603 |  |  | 2010-05-25 |
| 27 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=49647888](javascript:%20void%20window.open('../image/structurefly.cgi?sid=49647888&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [49647888](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=49647888) | [936147](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=936147) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 134.418 | 136.156 |  |  | 2010-05-25 |
| 28 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=17386215](javascript:%20void%20window.open('../image/structurefly.cgi?sid=17386215&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [17386215](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=17386215) | [6511353](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=6511353) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 136.955 | 133.061 |  |  | 2010-05-25 |
| 29 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=857211](javascript:%20void%20window.open('../image/structurefly.cgi?sid=857211&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [857211](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=857211) | [568592](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=568592) | 135 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 136.815 | 133.54 |  |  | 2010-05-25 |
| 30 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=51087863](javascript:%20void%20window.open('../image/structurefly.cgi?sid=51087863&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [51087863](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=51087863) | [13015548](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=13015548) | 134 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 133.974 | 134.07 |  |  | 2010-05-25 |
| 31 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=49647046](javascript:%20void%20window.open('../image/structurefly.cgi?sid=49647046&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [49647046](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=49647046) | [1603523](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1603523) | 134 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 133.618 | 135.341 |  |  | 2010-05-25 |
| 32 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=24786766](javascript:%20void%20window.open('../image/structurefly.cgi?sid=24786766&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [24786766](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=24786766) | [9947479](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=9947479) | 134 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 134.546 | 133.199 |  |  | 2010-05-25 |
| 33 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=51087900](javascript:%20void%20window.open('../image/structurefly.cgi?sid=51087900&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [51087900](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=51087900) | [5928853](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5928853) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 133.339 | 133.65 |  |  | 2010-05-25 |
| 34 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=51087848](javascript:%20void%20window.open('../image/structurefly.cgi?sid=51087848&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [51087848](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=51087848) | [12694583](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=12694583) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 133.095 | 132.819 |  |  | 2010-05-25 |
| 35 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=49668693](javascript:%20void%20window.open('../image/structurefly.cgi?sid=49668693&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [49668693](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=49668693) | [5339969](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5339969) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 133.238 | 133.214 |  |  | 2010-05-25 |
| 36 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=47199269](javascript:%20void%20window.open('../image/structurefly.cgi?sid=47199269&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [47199269](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=47199269) | [1754344](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=1754344) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-08 | 133.891 | 132.701 |  |  | 2010-05-25 |
| 37 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26730530](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26730530&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26730530](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26730530) | [243725](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=243725) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-08 | 133.181 | 131.986 |  |  | 2010-05-25 |
| 38 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=26662187](javascript:%20void%20window.open('../image/structurefly.cgi?sid=26662187&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [26662187](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=26662187) | [16682266](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=16682266) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 132.408 | 134.363 |  |  | 2010-05-25 |
| 39 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=22406994](javascript:%20void%20window.open('../image/structurefly.cgi?sid=22406994&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [22406994](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=22406994) | [5702759](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=5702759) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-08 | 133.383 | 132.061 |  |  | 2010-05-25 |
| 40 | [http://pubchem.ncbi.nlm.nih.gov/image/imgsrv.fcgi?sid=14745910](javascript:%20void%20window.open('../image/structurefly.cgi?sid=14745910&width=400&height=400',%20'StructureFly',%20'resizable=yes,%20scrollbars=yes,%20WIDTH=620,%20HEIGHT%20=%20620')) | [14745910](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?sid=14745910) | [9551998](http://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=9551998) | 133 | http://pubchem.ncbi.nlm.nih.gov/images/a_active.gif  Active |  | 1 | 2061-01-A01-01-06 | 134.084 | 132.173 |  |  |  |

AID 504579

**Name:** Inhibitors of T-Type Calcium Channels (rat DRG neuron currents).  
**Data** [**Source**](http://pubchem.ncbi.nlm.nih.gov/sources/sources.cgi?mode=contact&dsn=Vanderbilt%20Screening%20Center%20for%20GPCRs%2c%20Ion%20Channels%20and%20Transporters)**:** [Vanderbilt Screening Center for GPCRs, Ion Channels and Transporters](http://www.vanderbilt.edu/mlscn) (Ttype DRG neuron currents (rat))

**Target:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#xTarget', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=504579&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=504579&loc=ea_ras#top)

**Sequence:** [voltage-dependent T-type calcium channel subunit alpha-1H [Rattus norvegicus]](http://www.ncbi.nlm.nih.gov/sites/entrez?db=protein&cmd=search&term=71274194)  
  
[Gene:CACNA1H](http://www.ncbi.nlm.nih.gov/gene/114862) [Conserved Domain](http://www.ncbi.nlm.nih.gov/Structure/cdd/wrpsb.cgi?INPUT_TYPE=precalc&SEQUENCE=71274194) [Related Protein 3D Structures](http://structure.ncbi.nlm.nih.gov/Structure/cblast/cblast.cgi?client=entrez&query_gi=71274194)

Assay Provider: Xinmin Xie  
Assay Provider Affiliation: Bioscience Division, SRI International, Menlo Park, CA  
Grant Title: HTS Assay for Cav3 T-Type Channels using FLIPR  
Grant Number: NS050771-01  
  
T-type Ca2+ channels are also called low voltage-activated channels because they open at voltages near the resting membrane potential of most cells. In many types of neurons, Ca2+ influx through T-type channels triggers low-threshold spikes, which in turn trigger a burst of action potentials mediated by Na+ channels (1). Burst firing is thought to play an important role in the synchronized activity of the thalamus observed in absence epilepsy, and also in a wider range of neurological disorders characterized by thalamocortical dysrhythmia (2). Prominent T-currents are also observed in dorsal root ganglion neurons, with subsets of nociceptors expressing more T-current than high voltage-activated Ca2+ currents (3). Considerable evidence supports the notion that a T-channel antagonist would be a useful drug for the treatment of pain and epilepsy (4).  
  
1. Perez-Reyes, E: Molecular physiology of low-voltage-activated T-type calcium channels. Physiol. Rev. 2003; 83: 117-161.  
2. Llinas, R R, Ribary, U, Jeanmonod, D, Kronberg, E, and Mitra, P P: Thalamocortical dysrhythmia: A neurological and neuropsychiatric syndrome characterized by magnetoencephalography. Proc. Natl. Acad. Sci. U.S.A. 1999; 96: 15222-15227.  
3. Nelson, M T, Joksovic, P M, Perez-Reyes, E, and Todorovic, S M: The endogenous redox agent L-cysteine induces T-type Ca2+ channel-dependent sensitization of a novel subpopulation of rat peripheral nociceptors. J. Neurosci. 2005; 25: 8766-8775.  
4. Nelson, M, Todorovic, S, and Perez-Reyes, E: The role of T-type calcium channels in epilepsy and pain. Curr Pharm Des 2006; 12: 2189-2197.

**Panel Information:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#aPanel', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=504579&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=504579&loc=ea_ras#top)

**Inhibitors of T-Type Calcium Channels (DRG neuron current Ttype, Na+, K+ currents)** - Measurement of ML218 inhibition of rat DRG neuron currents with whole cell voltage clamp

Top of Form



|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **PID§** |  | **Name** | **Substance** | | **Panel Targets** | **Description** | **Additional Information** |
| Active | Inactive |
| 1 |  | DRG T-type current |  |  |  | Whole cell voltage clamp in native Dorsal Root Ganglion (DRG) neurons to determine effects on endogenous T-type currents | Taxonomy id: [10116](http://www.ncbi.nlm.nih.gov/sites/entrez?db=taxonomy&cmd=search&term=10116) |
| 2 |  | DRG Na+ current |  |  |  | Whole cell voltage clamp in native Dorsal Root Ganglion (DRG) neurons to determine effects on endogenous voltage-gated TTX-sensitive Na+ currents | Taxonomy id: [10116](http://www.ncbi.nlm.nih.gov/sites/entrez?db=taxonomy&cmd=search&term=10116) |
| 3 |  | DRG K+ current |  |  |  | Whole cell voltage clamp in native Dorsal Root Ganglion (DRG) neurons to determine effects on endogenous voltage-gated K+ currents | Taxonomy id: [10116](http://www.ncbi.nlm.nih.gov/sites/entrez?db=taxonomy&cmd=search&term=10116) |

Bottom of Form

**Protocol:** [http://pubchem.ncbi.nlm.nih.gov/images/ii.gif](javascript:%20void%20window.open('../help.html#aProtocol', 'pctHelp', 'resizable=yes, scrollbars=yes, WIDTH=800, HEIGHT=600'))[[http://pubchem.ncbi.nlm.nih.gov/images/top.gif](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=504579&loc=ea_ras#top)](http://pubchem.ncbi.nlm.nih.gov/assay/assay.cgi?aid=504579&loc=ea_ras#top)

The purpose of this assay was to follow up on the confirmatory and dose-response testing of the validated lead SAR series to characterize the candidate probe compound for in native rat Dorsal Root Ganglion (DRG) neurons to determine effects on endogenous T-type, Na+ and K+ currents.  
  
Whole-cell voltage-clamp recording techniques were employed. Ba2+ (10 mM, replacement of Ca2+) was used as the charge carrier to generate larger and relatively more stable currents. For recording T-channels, Ba2+ currents were rapidly activated and inactivated following step depolarization to various test potentials from a holding potential (Vh) of -100 mV. Then, for a single pulse, depolarized to -20mV. For recording voltage-gated TTX-sensitive Na channels, Na+ currents were activated following step depolarization to various test potentials or single pulse to +10mV from Vh of -100 mV. For recording voltage-gated K channels, K+ currents were activated following step depolarization to various test potentials or single pulse to +70mV from Vh of -60 mV.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TID</B?< span>** | **Name** | **Description** | **PID§** | **Panel Targets** |  | **Histogram** | **Type** | **Unit** |
|  | Outcome | The BioAssay activity outcome |  |  |  |  | Outcome |  |
|  | Score | The BioAssay activity ranking score |  |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Integer |  |
| 1 | Time\_0 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 2 | Time\_5 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 3 | Time\_10 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 4 | Time\_15 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 5 | Time\_20 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 6 | Time\_25 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 7 | Time\_30 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 8 | Time\_35 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 9 | Time\_40 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 10 | Time\_45 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 11 | Time\_50 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 12 | Time\_55 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 13 | Time\_60 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 14 | Time\_65 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 15 | Time\_70 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 16 | Time\_75 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 17 | Time\_80 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 18 | Time\_85 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 19 | Time\_90 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 20 | Time\_95 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 21 | Time\_100 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 22 | Time\_105 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 23 | Time\_110 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 24 | Time\_115 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 25 | Time\_120 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 26 | Time\_125 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 27 | Time\_130 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 28 | Time\_135 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 29 | Time\_140 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 30 | Time\_145 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 31 | Time\_150 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 32 | Time\_155 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 33 | Time\_160 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 34 | Time\_165 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 35 | Time\_170 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 36 | Time\_175 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 37 | Time\_180 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 38 | Time\_185 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 39 | Time\_190 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 40 | Time\_195 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 41 | Time\_200 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 42 | Time\_205 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 43 | Time\_210 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 44 | Time\_215 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 45 | Time\_220 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 46 | Time\_225 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 47 | Time\_230 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 48 | Time\_235 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 49 | Time\_240 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 50 | Time\_245 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 51 | Time\_250 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 52 | Time\_255 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 53 | Time\_260 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 54 | Time\_265 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 55 | Time\_270 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 56 | Time\_275 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 57 | Time\_280 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 58 | Time\_285 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 59 | Time\_290 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 60 | Time\_295 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 61 | Time\_300 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 62 | Time\_305 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 63 | Time\_310 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 64 | Time\_315 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 65 | Time\_320 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 66 | Time\_325 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 67 | Time\_330 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 68 | Time\_335 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 69 | Time\_340 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 70 | Time\_345 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 71 | Time\_350 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 72 | Time\_355 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 73 | Time\_360 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 74 | Time\_365 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 75 | Time\_370 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 76 | Time\_375 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 77 | Time\_380 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 78 | Time\_385 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 79 | Time\_390 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 80 | Time\_395 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 81 | Time\_400 | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 1 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 82 | Time\_0\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 83 | Time\_5\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 84 | Time\_10\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 85 | Time\_15\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 86 | Time\_20\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 87 | Time\_25\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 88 | Time\_30\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 89 | Time\_35\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 90 | Time\_40\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 91 | Time\_45\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 92 | Time\_50\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 93 | Time\_55\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 94 | Time\_60\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 95 | Time\_65\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 96 | Time\_70\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 97 | Time\_75\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 98 | Time\_80\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 99 | Time\_85\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 100 | Time\_90\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 101 | Time\_95\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 102 | Time\_100\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 103 | Time\_105\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 104 | Time\_110\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 105 | Time\_115\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 106 | Time\_120\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 107 | Time\_125\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 108 | Time\_130\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 109 | Time\_135\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 110 | Time\_140\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 111 | Time\_145\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 112 | Time\_150\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 113 | Time\_155\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 114 | Time\_160\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 115 | Time\_165\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 116 | Time\_170\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 117 | Time\_175\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 118 | Time\_180\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 119 | Time\_185\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 120 | Time\_190\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 121 | Time\_195\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 122 | Time\_200\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 123 | Time\_205\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 124 | Time\_210\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 125 | Time\_215\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 126 | Time\_220\_Na | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 2 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 127 | Time\_0\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 128 | Time\_5\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 129 | Time\_10\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 130 | Time\_15\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 131 | Time\_20\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 132 | Time\_25\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 133 | Time\_30\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 134 | Time\_35\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 135 | Time\_40\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 136 | Time\_45\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 137 | Time\_50\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 138 | Time\_55\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 139 | Time\_60\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 140 | Time\_65\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 141 | Time\_70\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 142 | Time\_75\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 143 | Time\_80\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 144 | Time\_85\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 145 | Time\_90\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 146 | Time\_95\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 147 | Time\_100\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 148 | Time\_105\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 149 | Time\_110\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 150 | Time\_115\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 151 | Time\_120\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 152 | Time\_125\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 153 | Time\_130\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 154 | Time\_135\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |
| 155 | Time\_140\_K | Current in Dorsal Root Ganglion (DRG) neurons recorded in 5 second intervals using a single voltage step from either -100 or -60 mV and depolarizing to +20mV. Test compound concentration at 1uM. Current reported in picoamps (pA). | 3 |  |  | http://pubchem.ncbi.nlm.nih.gov/images/histo.gif | Float | Unspecify |

For results see XLS spreadsheet.