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Assay : COX1/COX2 inhibitor screening

**Samples** : 04 compounds

Cell lines : ---

**Ref**. : ----

Date : 01-12-2022

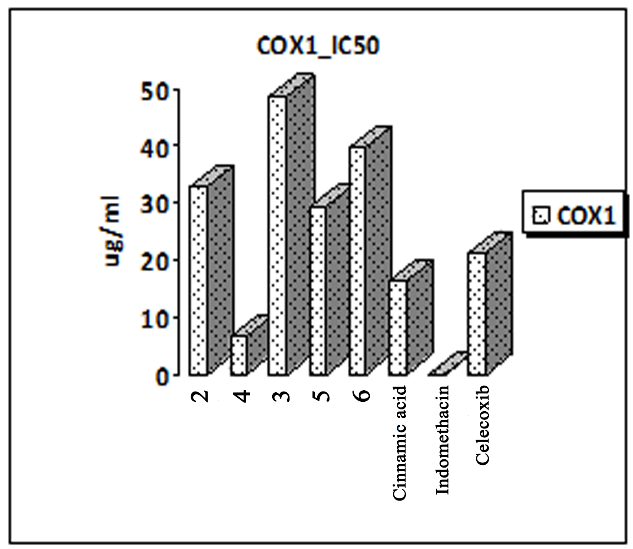
**Reader** : Tecan Spark

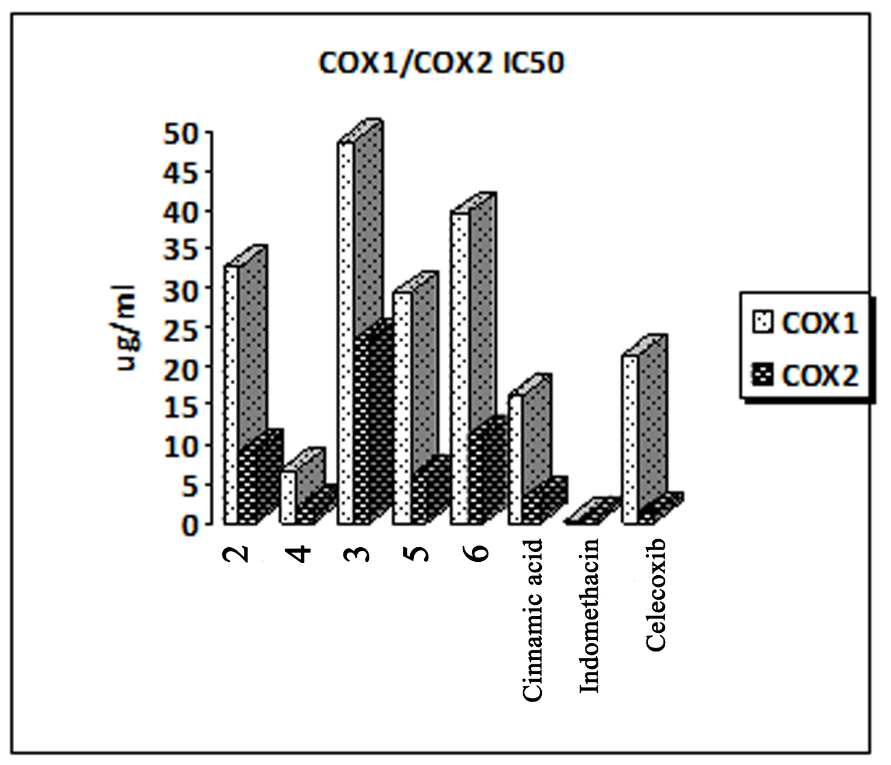
Kit used : ---

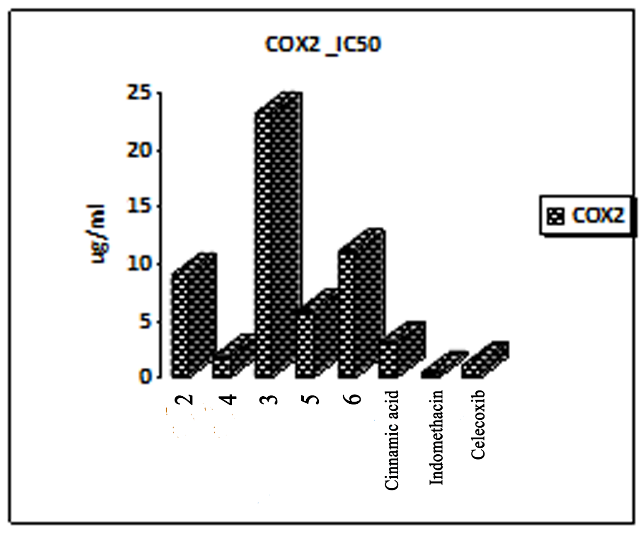
**Solvent** : DMSO

**Lab Report**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ser** | **Compound** | | | **COX1/2** | | **SI** |
| **code** | **MW** | **conc.** | **IC50**  **ug/ml** | |
| **COX1** | **COX2** |
| 1 | **2** | --- | --- | **32.65**±1.71 | **9.097**±0.38 | 3.589 |
| 2 | **4** | --- | --- | **6.735**±0.35 | **1.859**±0.07 | 3.623 |
| 3 | **3** | --- | --- | **48.74**±2.55 | **23.26**±0.98 | 2.095 |
| 4 | **5** | --- | --- | **29.42**±1.54 | **5.87**±0.24 | 5.012 |
| 5 | **6** | --- | --- | **39.53**±2.07 | **11.1**±0.47 | 3.561 |
| 6 | **Cinnamic acid** | --- | --- | **16.27**±0.85 | **3.152**±0.13 | 5.162 |
| \* | **indomethacin** | --- | --- | **0.145**±0.01 | **0.456**±0.02 | 0.318 |
| \*\* | **Celecoxib** | --- | --- | **21.27**±1.12 | **1.138**±0.04 | 18.69 |

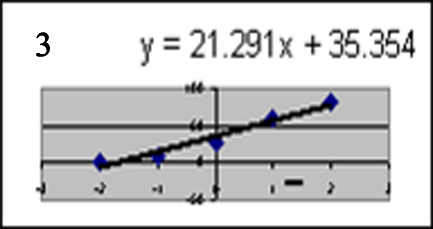
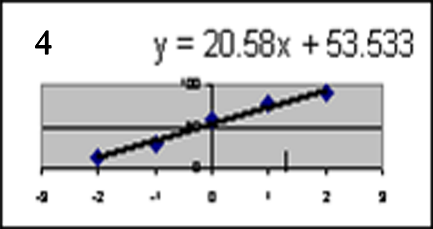






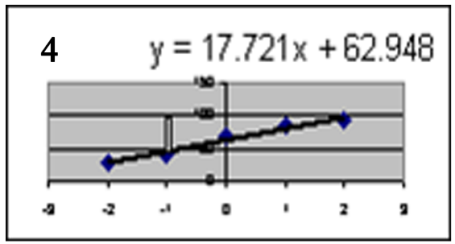
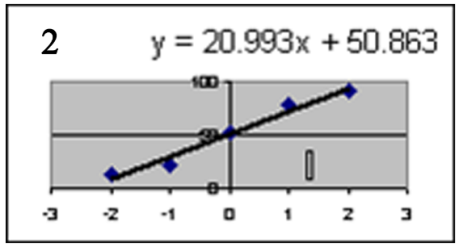
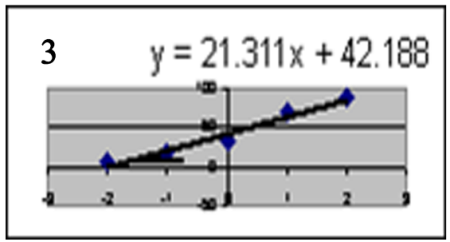
Detailed results :

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **COX1** | | | | | | | | | | | |  |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **2**   |  | | --- | |  | |  | 100 | 2 | 88.1 | 30 | 0 | 30 | 11.85 | 0 | 11.85 | 3.333 | 14.2214 |
|  |  | 10 | 1 | 63.4 | 30 | 0 | 30 | 36.59 | 0 | 36.59 | 3.333 | 43.9124 |
|  |  | 1 | 0 | 28.5 | 30 | 0 | 30 | 71.46 | 0 | 71.46 | 3.333 | 85.7606 |
|  |  | 0.1 | -1 | 8.97 | 30 | 0 | 30 | 91.02 | 0 | 91.02 | 3.333 | 109.235 |
|  |  | 0.01 | -2 | 3.4 | 30 | 0 | 30 | 96.59 | 0 | 96.59 | 3.333 | 115.92 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **4**   |  | | --- | |  | |  | 100 | 2 | 91.4 | 30 | 0 | 30 | 8.64 | 0 | 8.64 | 3.333 | 10.369 |
|  |  | 10 | 1 | 77.9 | 30 | 0 | 30 | 22.06 | 0 | 22.06 | 3.333 | 26.4746 |
|  |  | 1 | 0 | 56.7 | 30 | 0 | 30 | 43.28 | 0 | 43.28 | 3.333 | 51.9412 |
|  |  | 0.1 | -1 | 28.5 | 30 | 0 | 30 | 71.54 | 0 | 71.54 | 3.333 | 85.8566 |
|  |  | 0.01 | -2 | 13.2 | 30 | 0 | 30 | 86.79 | 0 | 86.79 | 3.333 | 104.158 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **3** |  | 100 | 2 | 81.4 | 30 | 0 | 30 | 18.61 | 0 | 18.61 | 3.333 | 22.3342 |
| |  | | --- | |  | |  | 10 | 1 | 60.8 | 30 | 0 | 30 | 39.22 | 0 | 39.22 | 3.333 | 47.0687 |
|  |  | 1 | 0 | 25.4 | 30 | 0 | 30 | 74.63 | 0 | 74.63 | 3.333 | 89.565 |
|  |  | 0.1 | -1 | 7.84 | 30 | 0 | 30 | 92.15 | 0 | 92.15 | 3.333 | 110.591 |
|  |  | 0.01 | -2 | 1.4 | 30 | 0 | 30 | 98.59 | 0 | 98.59 | 3.333 | 118.32 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **5** |  | 100 | 2 | 87 | 30 | 0 | 30 | 12.96 | 0 | 12.96 | 3.333 | 15.5536 |
| |  | | --- | |  | |  | 10 | 1 | 61.5 | 30 | 0 | 30 | 38.54 | 0 | 38.54 | 3.333 | 46.2526 |
|  |  | 1 | 0 | 30.3 | 30 | 0 | 30 | 69.72 | 0 | 69.72 | 3.333 | 83.6724 |
|  |  | 0.1 | -1 | 16.9 | 30 | 0 | 30 | 83.05 | 0 | 83.05 | 3.333 | 99.67 |
|  |  | 0.01 | -2 | 5.78 | 30 | 0 | 30 | 94.21 | 0 | 94.21 | 3.333 | 113.063 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **6** |  | 100 | 2 | 82.7 | 30 | 0 | 30 | 17.33 | 0 | 17.33 | 3.333 | 20.7981 |
| |  | | --- | |  | |  | 10 | 1 | 58.9 | 30 | 0 | 30 | 41.08 | 0 | 41.08 | 3.333 | 49.3009 |
|  |  | 1 | 0 | 28.5 | 30 | 0 | 30 | 71.45 | 0 | 71.45 | 3.333 | 85.7486 |
|  |  | 0.1 | -1 | 13.7 | 30 | 0 | 30 | 86.34 | 0 | 86.34 | 3.333 | 103.618 |
|  |  | 0.01 | -2 | 8.34 | 30 | 0 | 30 | 91.65 | 0 | 91.65 | 3.333 | 109.991 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **Cinnamic acid** | | 100 | 2 | 87.7 | 30 | 0 | 30 | 12.31 | 0 | 12.31 | 3.333 | 14.7735 |
| |  | | --- | |  | |  | 10 | 1 | 67.3 | 30 | 0 | 30 | 32.71 | 0 | 32.71 | 3.333 | 39.2559 |
|  |  | 1 | 0 | 43.1 | 30 | 0 | 30 | 56.86 | 0 | 56.86 | 3.333 | 68.2388 |
|  |  | 0.1 | -1 | 22 | 30 | 0 | 30 | 78.01 | 0 | 78.01 | 3.333 | 93.6214 |
|  |  | 0.01 | -2 | 8.36 | 30 | 0 | 30 | 91.63 | 0 | 91.63 | 3.333 | 109.967 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| |  | | --- | | **IND** | |  | 100 | 2 | 95.3 | 30 | 0 | 30 | 4.68 | 0 | 4.68 | 3.333 | 5.61656 |
|  |  | 10 | 1 | 90.4 | 30 | 0 | 30 | 9.59 | 0 | 9.59 | 3.333 | 11.5092 |
|  |  | 1 | 0 | 78.6 | 30 | 0 | 30 | 21.42 | 0 | 21.42 | 3.333 | 25.7066 |
|  |  | 0.1 | -1 | 61.4 | 30 | 0 | 30 | 38.61 | 0 | 38.61 | 3.333 | 46.3366 |
|  |  | 0.01 | -2 | 44.4 | 30 | 0 | 30 | 55.55 | 0 | 55.55 | 3.333 | 66.6667 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **CXB** |  | 100 | 2 | 87.6 | 30 | 0 | 30 | 12.39 | 0 | 12.39 | 3.333 | 14.8695 |
|  |  | 10 | 1 | 68.6 | 30 | 0 | 30 | 31.41 | 0 | 31.41 | 3.333 | 37.6958 |
| |  | | --- | |  | |  | 1 | 0 | 35.5 | 30 | 0 | 30 | 64.53 | 0 | 64.53 | 3.333 | 77.4437 |
|  |  | 0.1 | -1 | 17.6 | 30 | 0 | 30 | 82.39 | 0 | 82.39 | 3.333 | 98.8779 |
|  |  | 0.01 | -2 | 5.47 | 30 | 0 | 30 | 94.52 | 0 | 94.52 | 3.333 | 113.435 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |



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| **COX2** | | | | | | | | | | | |  |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| |  | | --- | | **2** | |  | 100 | 2 | 90.5 | 30 | 0 | 30 | 9.54 | 0 | 9.54 | 3.333 | 11.4491 |
|  |  | 10 | 1 | 77.4 | 30 | 0 | 30 | 22.61 | 0 | 22.61 | 3.333 | 27.1347 |
|  |  | 1 | 0 | 51.3 | 30 | 0 | 30 | 48.65 | 0 | 48.65 | 3.333 | 58.3858 |
|  |  | 0.1 | -1 | 21.9 | 30 | 0 | 30 | 78.12 | 0 | 78.12 | 3.333 | 93.7534 |
|  |  | 0.01 | -2 | 13.3 | 30 | 0 | 30 | 86.74 | 0 | 86.74 | 3.333 | 104.098 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **4** |  | 100 | 2 | 93.7 | 30 | 0 | 30 | 6.26 | 0 | 6.26 | 3.333 | 7.51275 |
| |  | | --- | |  | |  | 10 | 1 | 85.1 | 30 | 0 | 30 | 14.88 | 0 | 14.88 | 3.333 | 17.8578 |
|  |  | 1 | 0 | 67.9 | 30 | 0 | 30 | 32.06 | 0 | 32.06 | 3.333 | 38.4758 |
|  |  | 0.1 | -1 | 40.5 | 30 | 0 | 30 | 59.49 | 0 | 59.49 | 3.333 | 71.3951 |
|  |  | 0.01 | -2 | 27.4 | 30 | 0 | 30 | 72.55 | 0 | 72.55 | 3.333 | 87.0687 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **3** |  | 100 | 2 | 87.2 | 30 | 0 | 30 | 12.82 | 0 | 12.82 | 3.333 | 15.3855 |
|  |  | 10 | 1 | 68.9 | 30 | 0 | 30 | 31.06 | 0 | 31.06 | 3.333 | 37.2757 |
| |  | | --- | |  | |  | 1 | 0 | 31.9 | 30 | 0 | 30 | 68.11 | 0 | 68.11 | 3.333 | 81.7402 |
|  |  | 0.1 | -1 | 15.7 | 30 | 0 | 30 | 84.29 | 0 | 84.29 | 3.333 | 101.158 |
|  |  | 0.01 | -2 | 7.24 | 30 | 0 | 30 | 92.75 | 0 | 92.75 | 3.333 | 111.311 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **5** |  | 100 | 2 | 93 | 30 | 0 | 30 | 7.02 | 0 | 7.02 | 3.333 | 8.42484 |
|  |  | 10 | 1 | 81 | 30 | 0 | 30 | 19.02 | 0 | 19.02 | 3.333 | 22.8263 |
| |  | | --- | |  | |  | 1 | 0 | 61.3 | 30 | 0 | 30 | 38.69 | 0 | 38.69 | 3.333 | 46.4326 |
|  |  | 0.1 | -1 | 28.4 | 30 | 0 | 30 | 71.63 | 0 | 71.63 | 3.333 | 85.9646 |
|  |  | 0.01 | -2 | 11.4 | 30 | 0 | 30 | 88.64 | 0 | 88.64 | 3.333 | 106.379 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| |  | | --- | | **6** | |  | 100 | 2 | 90.6 | 30 | 0 | 30 | 9.36 | 0 | 9.36 | 3.333 | 11.2331 |
|  |  | 10 | 1 | 72.1 | 30 | 0 | 30 | 27.88 | 0 | 27.88 | 3.333 | 33.4593 |
|  |  | 1 | 0 | 45.7 | 30 | 0 | 30 | 54.27 | 0 | 54.27 | 3.333 | 65.1305 |
|  |  | 0.1 | -1 | 24.4 | 30 | 0 | 30 | 75.63 | 0 | 75.63 | 3.333 | 90.7651 |
|  |  | 0.01 | -2 | 12.5 | 30 | 0 | 30 | 87.46 | 0 | 87.46 | 3.333 | 104.962 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **Cinnamic acid** | | 100 | 2 | 93.9 | 30 | 0 | 30 | 6.07 | 0 | 6.07 | 3.333 | 7.28473 |
| |  | | --- | |  | |  | 10 | 1 | 84.1 | 30 | 0 | 30 | 15.92 | 0 | 15.92 | 3.333 | 19.1059 |
|  |  | 1 | 0 | 66.1 | 30 | 0 | 30 | 33.85 | 0 | 33.85 | 3.333 | 40.6241 |
|  |  | 0.1 | -1 | 38.1 | 30 | 0 | 30 | 61.94 | 0 | 61.94 | 3.333 | 74.3354 |
|  |  | 0.01 | -2 | 17.6 | 30 | 0 | 30 | 82.39 | 0 | 82.39 | 3.333 | 98.8779 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| |  | | --- | | **IND** | |  | 100 | 2 | 95.1 | 30 | 0 | 30 | 4.86 | 0 | 4.86 | 3.333 | 5.83258 |
|  |  | 10 | 1 | 92.9 | 30 | 0 | 30 | 7.06 | 0 | 7.06 | 3.333 | 8.47285 |
|  |  | 1 | 0 | 77.8 | 30 | 0 | 30 | 22.18 | 0 | 22.18 | 3.333 | 26.6187 |
|  |  | 0.1 | -1 | 54.9 | 30 | 0 | 30 | 45.14 | 0 | 45.14 | 3.333 | 54.1734 |
|  |  | 0.01 | -2 | 35.2 | 30 | 0 | 30 | 64.81 | 0 | 64.81 | 3.333 | 77.7798 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
| code | IC50 | conc | log | %inh | T2 | T1 | ∆T | OD2 | OD1 | ∆OD | slope | K.Activity |
| **CXB** |  | 100 | 2 | 93.6 | 30 | 0 | 30 | 6.36 | 0 | 6.36 | 3.333 | 7.63276 |
| |  | | --- | |  | |  | 10 | 1 | 88.6 | 30 | 0 | 30 | 12.39 | 1 | 11.39 | 3.333 | 13.6694 |
|  |  | 1 | 0 | 68.9 | 30 | 0 | 30 | 31.08 | 0 | 31.08 | 3.333 | 37.2997 |
|  |  | 0.1 | -1 | 47.8 | 30 | 0 | 30 | 52.19 | 0 | 52.19 | 3.333 | 62.6343 |
|  |  | 0.01 | -2 | 30.5 | 30 | 0 | 30 | 69.54 | 0 | 69.54 | 3.333 | 83.4563 |
| EC |  |  |  | 0 | 30 | 0 | 30 | 100 | 0 | 100 | 3.3333 | 120 |
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