1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio       | FOLD1  |         | FOLD2  |         | FOLD3  |         |
|-------------|--------|---------|--------|---------|--------|---------|
| 0.178861201 | 1      | 0.237951901 | 1      | 0.218263588 | 1      |
| 0.214106228 | 1.197052391 | 0.254600528 | 1.069966353 | 0.265160436 | 1.214863363 |
| 0.221617371 | 1.239046648 | 0.347017967 | 1.458353415 | 0.257233793 | 1.178546525 |

Relative 4-HNE expression / β-actin

- CTL: 0.09
- 0.4 μM IPA: * (p < 0.05)
- 0.8 μM IPA: * (p < 0.05)
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio     | FOLD1          |       |
|-----------|----------------|-------|
| 1,087727275 | 1,067727272  | 1     |
| 0,977136786 | 0,998328845  | 1     |
| 0,927427741 | 0,852628929   | 1     |

| Ratio     | FOLD2          |       |
|-----------|----------------|-------|
| 1,030933889 | 1,073033889  | 1     |
| 0,957980575 | 0,962980575  | 1     |
| 0,733379495 | 0,711379495  | 1     |

| Ratio     | FOLD3          |       |
|-----------|----------------|-------|
| 0,950708312 | 0,970708312  | 1     |
| 0,82604167  | 0,868840797   | 1     |
| 0,666376982 | 0,69806861    | 1     |

Relative NRF2 expression / β-actin

| Condition | Relative Expression |
|-----------|---------------------|
| CTL       | 1                   |
| 0.4 μM    | 0.99                |
| 0.8 μM    | 0.97                |

IPA (μM)
3C

1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

Ratio | FOLD1
---|---
0.226876575 | 1
0.252211628 | 1.11166879
0.288036175 | 1.269572123

Ratio | FOLD2
---|---
0.609317504 | 1
0.9330395 | 1.531720233
1.077912258 | 1.769048567

Ratio | FOLD3
---|---
0.430557542 | 1
0.496148098 | 1.152338652
0.570800492 | 1.325724057

Relative INOS expression / β-actin

![Graph showing relative INOS expression]
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

Relative pACC / ACC expression / β-actin

*  **
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio           | FOLD1       |          | FOLD2       |          | FOLD3       |          |
|-----------------|-------------|----------|-------------|----------|-------------|----------|
| 0,465462949     | 1           |          | 0,861885354 | 1        | 0,584047919 | 1        |
| 0,952987061     | 2,047396172 |          | 0,907392149 | 1,052799128 | 0,636127195 | 1,089169527 |
| 0,947433086     | 2,03546402  |          | 1,173240989 | 1,361249479 | 1,528026736 | 2,616269464 |

Relative pACC expression / β-actin
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio               | FOLD1      | 1                      |
|---------------------|------------|------------------------|
| 1,000795267         | 1,000795267| 1                      |
| 0,845981297         | 0,845981297| 0,84530905             |
| 0,879390267         | 0,879390267| 0,878691472            |

| Ratio               | FOLD2      | 1                      |
|---------------------|------------|------------------------|
| 0,840540218         | 0,840540218| 1                      |
| 0,555661132         | 0,555661132| 0,661076199            |
| 0,613099254         | 0,613099254| 0,729410968            |

| Ratio               | FOLD3      | 1                      |
|---------------------|------------|------------------------|
| 0,938664799         | 0,938664799| 1                      |
| 0,773123204         | 0,773123204| 0,823641415            |
| 0,968404372         | 0,968404372| 1,031682847            |
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio       | FOLD1           |       |
|-------------|-----------------|-------|
| 0.437623304 | 1               | 1     |
| 0.492109349 | 1.124504441     | 1.1245|
| 0.771326809 | 1.762535957     | 1.7625|

| Ratio       | FOLD2           |       |
|-------------|-----------------|-------|
| 0.543568572 | 1               | 1     |
| 0.648662035 | 1.193339843     | 1.1933|
| 0.972191738 | 1.788535592     | 1.7885|

| Ratio       | FOLD3           |       |
|-------------|-----------------|-------|
| 1.002604112 | 1               | 1     |
| 1.036991281 | 1.034297853     | 1.0343|
| 1.408209586 | 1.404551975     | 1.4045|

Relative FOXO1 expression / β-actin
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio       | FOLD1  | Ratio       | FOLD2  |
|-------------|--------|-------------|--------|
| 0.787472713 | 1      | 0.693513303 | 1      |
| 1.179511228 | 1.497843937 | 0.839986099 | 1.211204017 |
| 1.044594011 | 1.326514551 | 0.934049756 | 1.346837547 |

Relative PGC-1β expression / β-actin
4D

1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio       | FOLD1          | FOLD2          | FOLD3          |
|-------------|----------------|----------------|----------------|
| 0.630159589 | 1              | 0.92570575     | 0.680733772    |
| 0.802025508 | 1,272733958    | 1,122243536    | 0.857461681    |
| 0.827998862 | 1,313951063    | 1,201059178    | 0.948386537    |

Relative E-cadherin expression / β-actin

***

| Relative E-cadherin expression / β-actin |
|-----------------------------------------|
| CTL                                     |
| IPA (μM)                                |
| 0.4 μM                                  |
| 0.8 μM                                  |
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM
4D

Snail

1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

Snail

β-actin

Snail

β-actin

Snail

β-actin

Snail

β-actin

Ratio | FOLD1 | 1 | 0.583092174 | 0.581645097
     |       | 0.641425978 | 0.639834132
Ratio | FOLD2 | 1 | 1.205302039 | 1
     |       | 0.725928788 | 0.602279565
     |       | 0.688672592 | 0.571369308
Ratio | FOLD3 | 1 | 0.803377018 | 1
     |       | 0.597539559 | 0.74378473
     |       | 0.471320377 | 0.586673961

Relative Snail expression / β-actin

CTL | 0.4 μM | 0.8 μM

** ** ***
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM

| Ratio | FOLD1   | 1                           |
|-------|---------|-----------------------------|
|       | 1,046949086 | 1                           |
|       | 1,009968381 | 0,964677647                 |
|       | 0,832058294 | 0,794745709                 |

| Ratio | FOLD2   | 1                           |
|-------|---------|-----------------------------|
| 0,884683255 | 1                           |
| 0,758626698 | 0,857512216                 |
| 0,731012592 | 0,826298665                 |

| Ratio | FOLD3   | 1                           |
|-------|---------|-----------------------------|
| 0,906775503 | 1                           |
| 0,712971349 | 0,786271074                 |
| 0,71547299  | 0,789029906                 |

**Relative β-catenin expression / β-actin**

- **CTL**: 1.00
- **IPA (μM)**: 0.4 μM: 1.04, 0.8 μM: 1.00

* **P < 0.05**
** **P < 0.01
1. IPA CTL
2. IPA 0.4 μM
3. IPA 0.8 μM
4. IPA CTL
5. IPA 0.4 μM
6. IPA 0.8 μM
7. IPA CTL
8. IPA 0.4 μM
9. IPA 0.8 μM

CH223191 (AHRI)
Ketoconazole (PXRi)

Relative pACC / ACC expression / β-actin

IPA (μM)
6B

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)

IPA (μM)
6B

| IPA (μM) | CH223191 (AHRi) | Ketoconazole (PXRi) |
|---------|------------------|---------------------|
| IPA CTL | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA 0.4 μM | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA 0.8 μM | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA CTL | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA 0.4 μM | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA 0.8 μM | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA CTL | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA 0.4 μM | CH223191 (AHRi) | Ketoconazole (PXRi) |
| IPA 0.8 μM | CH223191 (AHRi) | Ketoconazole (PXRi) |