Synthesis, and biological evaluation of stilbene derivatives coupled to NO donors as potential antidiabetic agents

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IR(KBr) of compounds 3a-7c

3a

3b

3c
HPLC spectra of compounds 3a-7c

Specify methods used:
Instrument: Agilent 1100;
Column: Agilent SB-C18, 30 x 2.1 mm, 3.5 um;
Detector: DAD detector, 254 nm;
Flow rate: 1 ml / min
Mobile phase: methanol: water (0.1% glacial acetic acid); gradient elution
Injection volume: 5 ul
Temperature: 25 ° C
Spectra without purity table means that the purity is close to 100%.

3a

| #  | Meas. Ret. Time | Main Peak | Peak Height | Main Peak Area | Main Peak Area % |
|----|----------------|-----------|-------------|----------------|------------------|
| 1  | 5.084          | 1.126     | 3.856       | 0.262          |
| 2  | 5.241          | 245.901   | 1454.061    | 99.737         |

3b
|    | Meas. Ret. | Time (min) | Main Peak Height (mAU) | Main Peak Area (mAU) | Main Peak Area % |
|----|------------|------------|------------------------|---------------------|------------------|
| 1  | 4.661      | 0.570      | 2.222                  | 0.973               |
| 2  | 5.087      | 0.830      | 3.364                  | 1.472               |
| 3  | 5.709      | 44.707     | 222.807                | 97.554              |

3c

VWD1 A, Wavelength=254 nm (YQQ16/M-400.D)

|    | Meas. Ret. | Time (min) | Main Peak Height (mAU) | Main Peak Area (mAU) | Main Peak Area % |
|----|------------|------------|------------------------|---------------------|------------------|
| 1  | 4.662      | 0.570      | 2.222                  | 0.973               |
| 2  | 5.087      | 0.830      | 3.364                  | 1.472               |
| 3  | 5.971      | 44.707     | 222.807                | 97.554              |

3d

VWD1 A, Wavelength=254 nm (YQQ16/14L.D)
This means that the purity is close to 100%.

This means that the purity is close to 100%.
This means that the purity is close to 100%.

7c

| # | Meas. Ret. | Time | Main Peak Height | Main Peak Area | Main Peak Area % |
|---|------------|------|------------------|----------------|------------------|
| 1 | 3.506 | 0.486 | 5.667 | 1.667 |
| 2 | 3.392 | 0.196 | 1.271 | 0.373 |
| 3 | 4.397 | 0.536 | 5.568 | 1.638 |
| 4 | 4.552 | 0.504 | 2.979 | 0.876 |
| 5 | 5.082 | 0.474 | 2.570 | 0.756 |
| 6 | 5.708 | 63.319 | 321.843 | 94.688 |
Mass spectrum of compounds 3a-7c

3a

+MS, 5.4min (#220)

3b

+MS2(346.0), 5.4min (#221)

3c

+MS, 6.0min (#244)
$^1$H NMR (600 MHz, DMSO-d$_6$) of compounds 3a-7c
$^{13}$C NMR (150 MHz, DMSO-$d_6$) of compounds 3a-7c
