



SUPPLEMENTARY MATERIAL TO
**Amino-peptidase N inhibition could be involved
in the anti-angiogenic effect of dobesilates**

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SOME PHYSICAL, ANALYTICAL AND SPECTRAL DATA FOR THE EXAMINED
DOBESILATES

Calcium 2,5-dihydroxybenzenesulfonate (2). Yield: 94 %; white solid; m.p.:
189–191 °C; Ca content (AAS) calcd. for C₁₂H₂₀CaO₁₅S₂: 7.88 %. Found: 8.06
%; IR (ATR, cm⁻¹): 703 (C–S– stretching), 860 (CH bending of aromatic ring),
1338, 1445 (SO₂ stretching), 1495 (C=C stretching of aromatic ring), 1644 (C=C
stretching of aromatic ring), 3010 (CH stretching of aromatic ring), 3248 (OH
stretching); ¹H-NMR (200 MHz, DMSO-*d*₆, δ / ppm): 5.51 (14H, *bs*, 4 OH + 5
H₂O), 6.60 (4H, *m*, aromatic), 6.87 (2H, *m*, aromatic); ¹³C-NMR (50 MHz,
DMSO-*d*₆, δ / ppm): 149.17 (C), 146.11 (C), 130.92 (C), 118.32 (CH), 116.94
(CH), 113.08 (CH); UV–Vis (H₂O, λ_{max} / nm): 220, 299.

Magnesium 2,5-dihydroxybenzenesulfonate (4). Yield: 72 %; white solid;
m.p.: > 279 °C; Mg content (AAS) calcd. for C₁₂H₃₀MgO₂₀S₂: 4.17. Found:
4.38; IR (ATR, cm⁻¹): 730 (C–S– stretching) 877 (CH bending of aromatic ring),
1331, 1449 (SO₂ stretching), 1500 (C=C stretching of aromatic ring), 1663 (C=C
stretching of aromatic ring), 3376 (OH stretching); ¹H-NMR (200 MHz, DMSO-
*d*₆, δ / ppm): 4.00 (24H, *bs*, 4 OH + 10H₂O), 6.59 (4H, *m*, aromatic), 6.87 (2H, *t*,
J = 1.7 Hz, aromatic); ¹³C-NMR (50 MHz, DMSO-*d*₆, δ / ppm): 149.18 (C),
146.11 (C), 133.20 (C), 118.29 (CH), 116.94 (CH), 113.08 (CH); UV–Vis (H₂O,
λ_{max} / nm): 220, 294.

Zinc 2,5-dihydroxybenzenesulfonate (5). Yield: 80 %; pale yellow solid;
m.p.: 171–173 °C under decomposition; Zn content (AAS) calcd. for
C₁₂H₂₆O₁₈S₂Zn: 11.13. Found: 11.65; IR (ATR, cm⁻¹): 703 (C–S– stretching),

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871 (CH bending of aromatic ring), 1327, 1469 (SO₂ stretching), 1494 (C=C stretching of aromatic ring), 1655 (C=C stretching of aromatic ring), 3010 (CH stretching of aromatic ring), 3242 (OH stretching); ¹H-NMR (200 MHz, DMSO-*d*₆, δ / ppm): 3.97 (20H, *bs*, 4 OH + 8 H₂O), 6.59 (4H, *m*, aromatic), 6.86 (2H, *m*, aromatic); ¹³C-NMR (50 MHz, DMSO-*d*₆, δ / ppm): 149.16 (C), 146.11 (C), 131.00 (C), 118.27 (CH), 116.92 (CH), 113.07 (CH); UV-Vis (H₂O, λ_{max} / nm): 220, 301.