

$[(C_3H_4N_2)_2Au]Cl$ – a bis protic Gold(I)-NHC[†]

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[†] Electronic Supplementary Information (ESI)

Materials and cell lines

The human ovarian carcinoma cell line A2780 was obtained from European Collection of Cell Cultures (ECACC, Salisbury, UK). The human chronic myelogenous leukemia cell line K562 was obtained from the German Collection of Microorganisms and Cell Cultures (DSMZ, Germany). FlpInTREx293TM-cells were obtained from Invitrogen, Darmstadt, Germany) and transfected with either pcDNA5/FRT/TO[®] vector containing the coding sequence of human copper-transporter-1 (CTR1) or empty vector as control. All other reagents were supplied by Sigma Chemicals unless otherwise stated.

Cell culture

All cell lines were grown at 37°C under humidified air supplemented with 5% CO₂ in RPMI 1640 (Invitrogen, Germany) containing 10% fetal calf serum (PAN Biotech, Germany), 100 IU/mL penicillin, 100 µg/mL streptomycin and 2 mM glutamine. The cells were grown to 80% confluency before using them for the MTT cell viability assay.

MTT cell viability assay

The rate of cell-survival under the action of test substances was evaluated by an improved MTT assay as previously described.^{E1} The assay is based on the ability of viable cells to metabolize yellow 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT, AppliChem, Germany) to violet formazan crystals that can be detected spectrophotometrically. In brief, A2780 cells were seeded at a density of 8,000 cells/well and K562 at a density of 30,000 cells/well in 96well plates (Sarstedt, Germany). FlpInTREx293TM-cells were seeded in 24-well plates (30.000 cells per well). After 24 h, cells were exposed to the test compounds at concentrations of 10⁻⁵ M and 10⁻⁴ M. Incubation was ended after 72 h and cell survival was determined by addition of MTT solution (5 mg/mL in phosphate buffered saline). The formazan precipitate was dissolved in DMSO. Absorbance was measured at 544 nm and 620 nm in a FLUOstar microplate-reader (BMG LabTech, Offenburg, Germany). The absorbance of untreated control cells was taken as 100% viability. All tests were performed in triplicate.

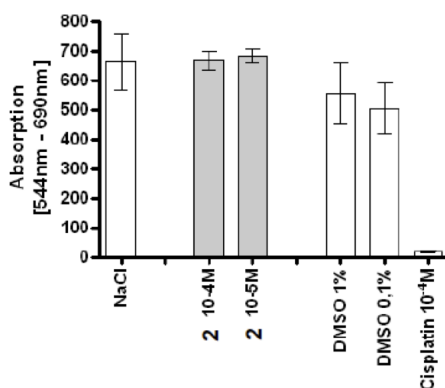


Fig. E1 Viability of K562 cells incubated with 2 by MTT-Assay.

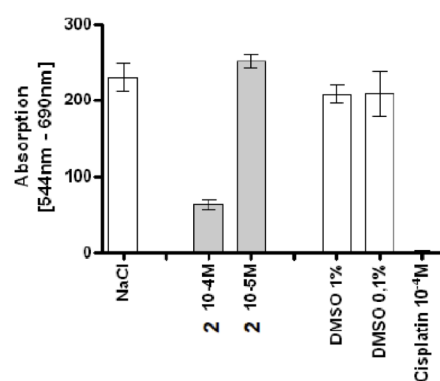
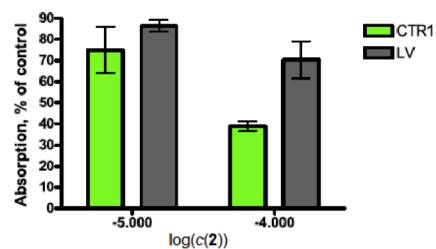


Fig. E2 Viability of A2780 cells incubated with **2** by MTT-Assay.

Fig. E3 Viability of FlpInTREx293TM-cells transfected either with pcDNA5/FRT/TO[®] vector containing the coding sequence of human



copper-transporter-1 (CTR1) or empty vector as control incubated with **2**.

References

E1 H. Müller, M. U. Kassack, M. Wiese, *J Biomol Screen.* 2004, **9**, 506–515.