

*Appendix S1.* Artificial sweat (6, 9) consisting of deionized water, 0.5 % (v/v) sodium chloride ((Acros Organics, Morris Plains, NJ, USA), 0.1% (v/v) lactic acid (Sigma Chemical co, St Louis, MO, USA) and 0.1% (v/v) urea (Sigma Chemical Co.) was prepared as described in (7). The pH was adjusted with ammonia (Scharlau Chemie, Barcelona, Spain). The solution was kept in the refrigerator. Solutions of 0.1 M cysteine (ICN Biomedicals, Aurora, OH, USA), 0.1 M glutathione (ICN Biomedicals), 0.1 M penicillamine (Acros Organics, Morris Plains, NJ, USA), 0.5 M nitric acid (Scharlau Chemie, Sentmenat, Spain), 0.1 mM sodium hydroxide (Acros Organics) and 1% lactic acid (Sigma Chemical Co.) were prepared in deionized water. For the amino acid solutions the pH was adjusted with nitric acid. For sample analysis, gold standard containing chloroauric acid corresponding to 1000 ppm gold (BDH Laboratory Supplies, Poole, UK) and samples were diluted in Suprapur nitric acid (Merck, Darmstadt, Germany). Ethanol (Kemetyl, Haninge, Sweden) was used for cleaning the metal discs before extraction.