## Supplementary info

*In vivo* [<sup>64</sup>Cu]CuCl<sub>2</sub> PET imaging reveals activity of Dextran-Catechin on tumor copper homeostasis



Suppl. Mat. Figure 1: Intracellular copper concentration in neuroblastoma cancer cell lines SK-N-BE(2)-C and normal human astrocytes (NHA) and non-malignant fibroblast (MRC-5) (A) and CTR1 expression for the same cell populations (B). Data obtained as mean of at least three experiments, deviation calculated as SEM (\*\*\*\*: p<0.0001).



Suppl. Mat. Figure 2: Dose response to Dextran-Catechin in neuroblastoma SK-N-BE(2)-C cell lines and normal human astrocytes (NHA) and non-malignant fibroblast (MRC-5) (A). Representative western blot showing the absence of any effect of Dextran-Catechin on the expression of CTR1 in NHA cells (B). Data obtained as mean of at least three experiments, deviation calculated as SEM (\*\*\*\*: p < 0.0001).



Suppl. Mat. Figure 3: Quantitative real-time PCR (RT-PCR). Analysis showed no effect of Dextran-Catechin at mRNA levels for CTR1. For RT-PCR, the following primers were used for the amplification of CTR1, forward primer 5'-ATACAGCTGGAGAAATGGCTGG-3' and reverse primer 5'-TTGTGACTTACGCAGCAGGC-3'. GUSB was used as reference gene with the following primers: 5'- TGGTGCGTAGGGACAAGAAC-3' (forward) and 5'-CCAAGGATTTGGTGTGAGCG-3' (reverse). The experiments were done in triplicated. The relative expression of CTR1 was normalized to GUSB expression.



Suppl. Mat. Figure 4: western blot (A) and densitometry (B) analysis showing lower expression of CTR1 in mice (n=4 mice per group) after 5 h of treatment with Dextran-Catechin. C1, C2, C3, C4 and T1, T2, T3, T4 are proteins extracted from tumors of mice injected with saline and Dextran-Catechin respectively. Deviation calculated as SEM (\*: p<0.05).