Fig. S1. Relative experimental uncertainty (in %) as function of $EC_{Ra}$ (in Bq kg$^{-1}$) for the measurement method used in this paper (i.e., the SLC method: long counting session after long accumulation in container). A total of 596 measurements are shown (Girault et al., 2017), including 371 on human hair in this study. Symbol color classifies the sample mass used in the accumulation experiments.
Fig. S2. Distributions of $EC_{Ra}$ from (a) human hair (n=93), animal bones (n=27) and terrestrial rocks (n=1655). The data from animal bone samples were presented by Perrier et al. (2016b). One additional sample consists of one Merovingian skull from France (courtesy of Y. Gallet). The data from terrestrial rock samples, including samples from Nepal (915), France (384), and other locations, were partially presented by Girault et al. (2017). Cumulated distributions (scale on the right hand side) are shown as solid black curves and mean values as vertical dashed black lines.
Fig. S3. $EC_{Ra}$ from human hair as function of the age of the individuals in logarithmic scale. Data from females and males natural hair, and from color-treated hair, are shown separately.
Fig. S4. Distributions of $EC_{Ra}$ from natural human hair as function of geographical location in uranium non-contaminated areas: (a) Mitry-Mory, Seine-et-Marne, France (n=38), (b) Saint-Yrieix-la-Perche, Haute-Vienne, France (n=6), and (c) other locations (n=15) including other French cities (Paris, Levallois-Perret, Villejuif, Suresnes, Toulouse, Sanary-sur-Mer, Vaugrigneuse, Clermont-l’Hérault) (n=10) and the city of Kathmandu, Nepal (n=2). Cumulated distributions (scale on the right hand side) are shown as solid black curves and mean values as vertical dashed black lines.