Electronic Supplementary Material (ESI) for Materials Advances.

Supporting Information

Luminescent Protein-Rare Earth Fluoride Nanoflowers

Wenyu Wei, Manman He, Jianrui Ma, Yirui Fan, Peng Liu, Jianxi Xiao

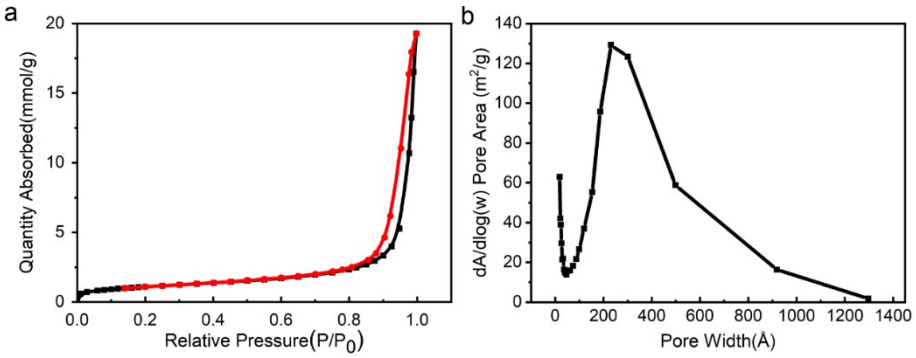

Figure S1. Nitrogen adsorption/desorption isotherms of trypsin-$Na_5Yb_9F_{32}$ hybrid nanoflowers (a), and the corresponding BJH pore sizes distribution plot of trypsin-$Na_5Yb_9F_{32}$ (b).

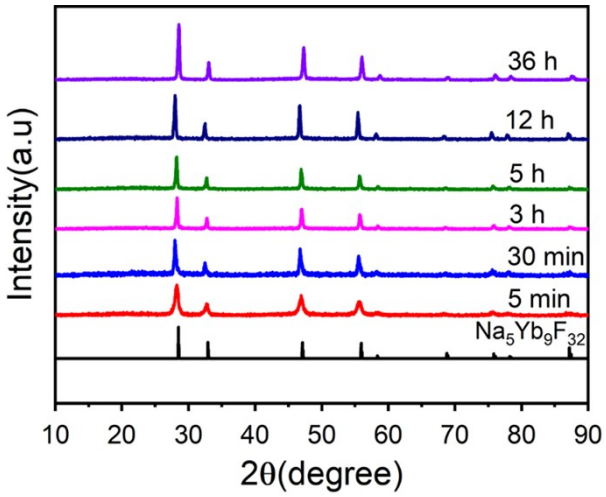

Figure S2. XRD patterns of hybrid nanomaterials prepared at different incubation time: 5 min, 30 min, 3 hrs, 5 hrs, 12 hrs and 36 hrs. Standard XRD pattern of $Na_5Yb_9F_{32}$ (JCPDS No. 27-1426) was shown beneath the plots of hybrid nanomaterials.

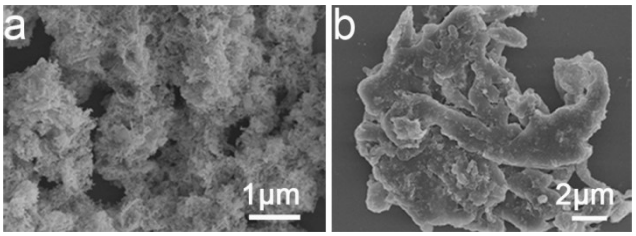

Figure S3. SEM images of the trypsin-$Na_5Yb_9F_{32}$ hybrid nanoflowers treated by calcination (a), and glutaraldehyde/ EDTA (b). Calcination was performed at 350 °C for 6 hrs. The trypsin-$Na_5Yb_9F_{32}$ hybrid nanoflowers were first treated with glutaraldehyde (0.8 wt %) and then EDTA (1 wt %).