Supplementary Data 2.

Five µL of OA synovial fluid were diluted in acetate buffer 1:1 and passed throw a syringe with needles 21G, 27G, 30G. Samples were then filter through a 50kDa cutoff amicon and spun at 14000g at 18°C for 30min. Samples were treated with DMSO vehicle or 10µM GB111-NH2 cathepsin inhibitor (34), for an hour at 37°C. After pretreatment, the samples were labeled with 5 µM GB123 for one hour at 37°C. Reaction was stopped by adding 4 x sample buffer and boiled for 10 min. Samples were separated on a 12.5 % SDS PAGE and scanned for Cy5 fluorescence with a Typhoon scanner.