TDAG8, TRPV1, and ASIC3 involved in establishing hyperalgesic priming

in experimental rheumatoid arthritis

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Suppl Fig. 1 **Histology of ipsilateral joint in arthritic TRPV1**^{+/-} **mice.** Samples of ipsilateral TRPV1^{+/-} joints at 4 week stained with hematoxylin and eosin. Data are mean±SEM severity score for synovial inflammation, bone erosion, and cartilage damage.



Suppl Fig. 2 **TDAG8 is expressed in joint afferents.** The mouse was intraplantarly injected with shTDAG8 (red fluorescence) and intra-articularly injected with fluorogold (FG, green fluorescence) for 7 days, and mouse was then intra-articularly injected with 5 μ g CFA. After 1 week, ipsilateral DRG was isolated, sectioned and stained with anti-TDAG8 antibody (blue fluorescence). * indicates neurons with FG-labeling (FG⁺) and shTDAG8 expression (shTDAG8⁺). Arrowheads indicate FG⁺/ shTDAG8⁻ neurons express TDAG8 protein.



Suppl Fig. 3 ASIC3 is expressed in synovial sublining and cartilage, but TDAG8 is expressed in synovial sublining. Samples of joints from WT mice at 12 weeks were stained with anti-ASIC3 or anti-TDAG8 antibodies, followed by FITC- or AP-conjugated secondary antibodies, respectively. Synovial sublining and cartilage was showed. Green fluoresence indicates ASIC3-positive immunoreactivity. Blue dots indicate TDAG8-positive immunoreactivity.