Supplementary Fig 1. ET-induced paw swelling is independent of targeting ANTXR2 on nociceptive neurons.



 $Na_v 1.8^{cre/+} / ANTXR2^{fl/fl} (Cre+) \ conditional \ KO \ mice \ or \ Na_v 1.8^{+/+} / ANTXR2^{fl/fl} \ littermate \ controls \ (Cre-) \ received \ subcutaneous \ footpad \ injection \ of \ ET \ (2 \ ug \ PA + 2 \ ug \ EF) \ (n=5-7). \ No \ significant \ differences \ were \ detected.$

Supplementary Fig 2. Nociceptor ablation does not affect mortality induced by Bacillus anthracis infection.



(A) RTX- or Vehicle-treated mice received subcutaneous footpad injection of 1×10^7 CFUs of *B. anthracis* Sterne (n=7-8).

(B) Na_v1.8^{cre/+}/DTA (Cre+) or Na_v1.8^{+/+}/DTA littermate controls (Cre-) received subcutaneous footpad injection of 1×10^7 CFUs of *B. anthracis* Sterne (n=7-8).

Statistical analysis: (A, B) No significant differences detected by the Log-rank (Mantel-Cox) test.

Supplementary Fig 3. Nociceptor ablation does not affect bacterial load or dissemination following *Bacillus anthracis* infection.



(A-B) RTX- or Vehicle-treated mice received subcutaneous footpad injection of 1×10^7 CFUs of *B. anthracis* Sterne. At (A) 5 or (B) 48 hours post-infection (hpi), the ipsilateral foot and popliteal lymph node, liver and spleen were harvested. The bacterial load in each organ was normalized to organ weight.

Statistical analysis: (A, B) No significant differences detected by unpaired t-test.

Supplementary Fig 4. Intrathecal administration of RTX significantly attenuates response to noxious heat.



Mice received intrathecal injection of RTX or Vehicle. Following a 4-week rest period, responses to the hot plate test were measured (n=10). **** p < 0.0001, unpaired t-test.

Supplementary Fig 5. Protein sequence of EF used in this study.

ANEHYTESDIKRNHKTEKNKTEKEKFKDSINNLVKTEFTNETLDKIQQTQDLLKKIPKDVLEIYSELGGEIYFTDI DLVEHKELQDLSEEEKNSMNSRGEKVPFASRFVFEKKRETPKLIINIKDYAINSEQSKEVYYEIGKGISLDIISKDK SLDPEFLNLIKSLSDDSDSDLLFSQKFKEKLELNNKSIDINFIKENLTEFQHAFSLAFSYYFAPDHRTVLELYAPD MFEYMNKLEKGGFEKISESLKKEGVEKDRIDVLKGEKALKASGLVPEHADAFKKIARELNTYILFRPVNKLATN LIKSGVATKGLNVHGKSSDWGPVAGYIPFDQDLSKKHGQQLAVEKGNLENKKSITEHEGEIGKIPLKLDHLRIEE LKENGIILKGKKEIDNGKKYYLLESNNQVYEFRISDENNEVQYKTKEGKITVLGEKFNWRNIEVMAKNVEGVLK PLTADYDLFALAPSLTEIKKQIPQKEWDKVVNTPNSLEKQKGVTNLLIKYGIERKPDSTKGTLSNWQKQMLDRL NEAVKYTGYTGGDVVNHGTEQDNEEFPEKDNEIFIINPEGEFILTKNWEMTGRFIEKNITGKDYLYYFNRSYNKI APGNKAYIEWTDPITKAKINTIPTSAEFIKNLSSIRRSSNVGVYKDSGDKDEFAKKESVKKIAGYLSDYYNSANHI FSQEKKRKISIFRGIQAYNEIENVLKSKQIAPEYKNYFQYLKERITNQVQLLLTHQKSNIEFKLLYKQLNFTENETD NFEVFQKIIDEK