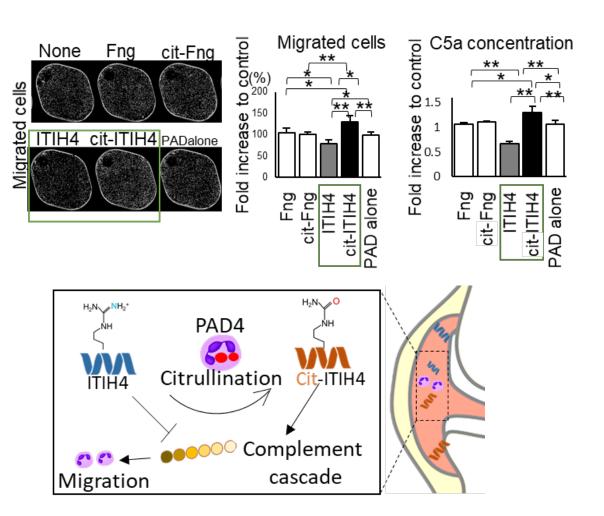
Citrullination of ITIH4 changes its function to up-regulate neutrophilic migration by activating the complement cascade.



The citrullinated inter-alphatrypsin inhibitor heavy chain 4 (cit-ITIH4) was identified as its blood level was associated with the arthritis score in peptide glucose-6-phosphate-isomerase-induced arthritis (pGIA) mice and the disease activity in patients with rheumatoid arthritis (RA) (Kawaguchi H, et al. Arthritis Res Ther. 2018)

Here, we demonstrated that cit-ITIH4 is generated mainly in inflamed joints by neutrophils via PAD4.

Additionaly, citrullination of ITIH4 may change its function to upregulate neutrophilic migration by activating the complement cascade.

References: Osada A et al., *Clin Exp Immunol*, 2020 Nov 25. doi:10.1111/cei.13556.(Online ahead of print.) Contact: Associate Professor Isao Matsumoto