## INFLAMMATORY MEDIATOR REGULATION OF TRP CHANNELS PGE2 ►© ∘**ợ**℃a²+ Na ∘**⊙**°Ca²+ Na O Lipids 🖪 Primary sensory neuron ВК K04632 +p $\dot{\mathbf{Q}}_{AA}$ K03915... ිල PUFAs K07413... 5HT O EET HIS Arachidonic acid metabolism K04149 **Ò**cAMP IP3 🍑 Lysophospholipids Mast cell IP3 o ATP DAG **O** DAG Calcium signaling pathway K04269 HPETE K02677... Ca<sup>2+</sup>Na<sup>+</sup> TRP channels involved in thermal transduction Tissue injury Temperature sensitivity Temperature sensitivity Nonthermal Channel Nonthermal Channel agonists agonists Ca<sup>2+</sup>Na<sup>+</sup> $Ca^{2+}$ ► Increased transduction/— — → Peripheral excitability sensitization Hypotonic OCapsaicin >42°C ~27°C-42°C • **Φ**<sup>5</sup> 4-α phorbol OLipoxygenase products Resiniferatoxin O Menthol <25°C O NADA o <sub>Icilin</sub> Na<sup>+</sup>, Ca<sup>2+</sup> Eucalyptol O Anandamide O Ethanol MAPK signaling pathway °**O**° Cinnamaldehyde <17°C Acidic pH 07 K04519 K04386... Mustard oil >52°C 0 Macrophage Allicin Camphor >33°C o Icilin K03176 O<sub>2-APB</sub> IP3 K06068 04750 10/23/15 (c) Kanehisa Laboratories