INFLAMMATORY MEDIATOR REGULATION OF TRP CHANNELS PGE2 ►©* ∘**φ**℃a²+ Na °**О**°Са²⁺ Nа O Lipids 🖪 K04234 K16342... Primary sensory neuron ВК K04632 +p K03915... K16342... ිල PUFAs K07413... 5HT K04157 K08041... K05858 O EET HIS Arachidonic acid metabolism K04149 **Ò**cAMP IP3 🍑 Lysophospholipids Mast cell IB3 Q₂ ATP **O** DAG Calcium signaling pathway DAG K04269 HPETE K04345 K04958... K18050 K06269 K02677... $Ca^{2+}Na^{+}$ TRP channels involved in thermal transduction Tissue injury Temperature sensitivity Temperature sensitivity Nonthermal Nonthermal Channel Channel agonists Ca²⁺Na⁺ agonists Ca^{2+} ► Increased transduction/— — → Peripheral excitability sensitization Hypotonic OCapsaicin >42°C ~27°C-42°C K04973 O_{4-α phorbol} OLipoxygenase products K04515 K02183 Resiniferatox<u>in</u> O Menthol <25°C O NADA o _{Icilin} K04983 K04829... K05222 Na⁺, Ca²⁺ O Anandamide © Eucalyptol O Ethanol MAPK signaling pathway <17°C ୍**ଠ**ି Cinnamaldehyde Acidic pH 07 K04441... K04519 K04386... Mustard oil >52°C K04984 0 Macrophage DAG Allicin O_{Camphor} K18050 >33°C o Icilin K04972 K03176 K05222 O_{2-APB} IP3 K06068 K05704 K00922... 04750 10/23/15 (c) Kanehisa Laboratories