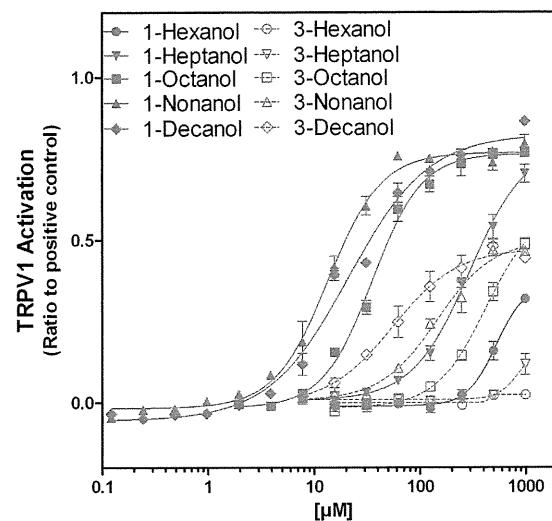


Fig. 25 Chemical structures of aliphatic alcohols.

hTRPV1



hTRPA1

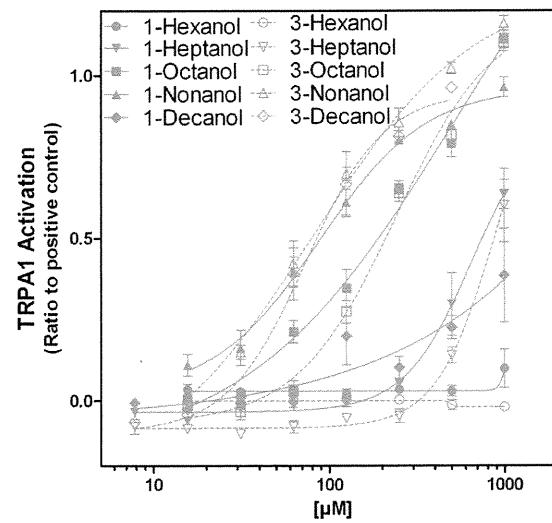
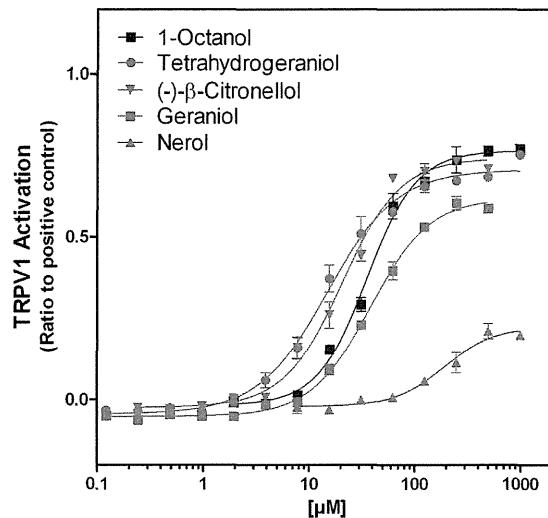


Fig. 26 Activation of hTRPV1 and hTRPA1 by C6-C10 aliphatic alcohols.

hTRPV1



hTRPA1

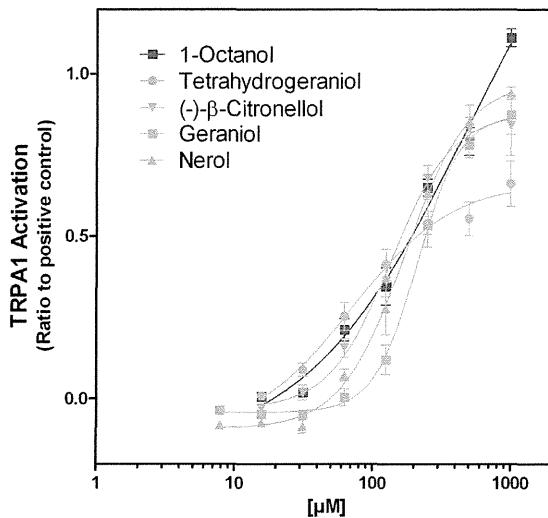
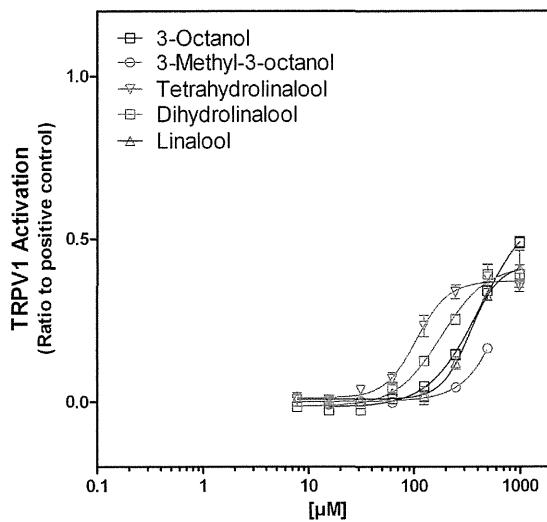


Fig. 27 Activation of hTRPV1 and hTRPA1 by monoterpene alcohols (1-OH).

hTRPV1



hTRPA1

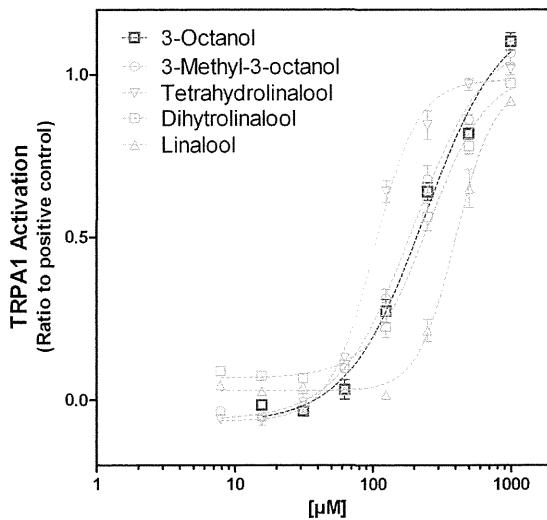
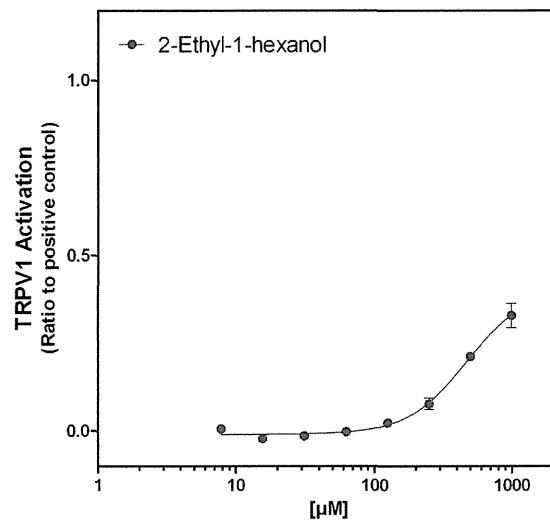


Fig. 28 Activation of hTRPV1 and hTRPA1 by monoterpene alcohols (3-OH).

hTRPV1



hTRPA1

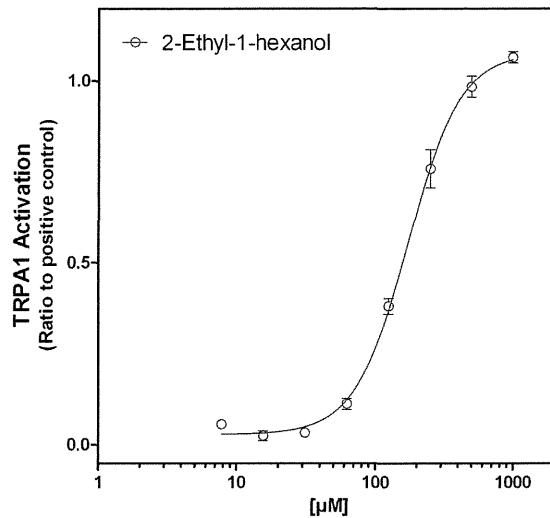
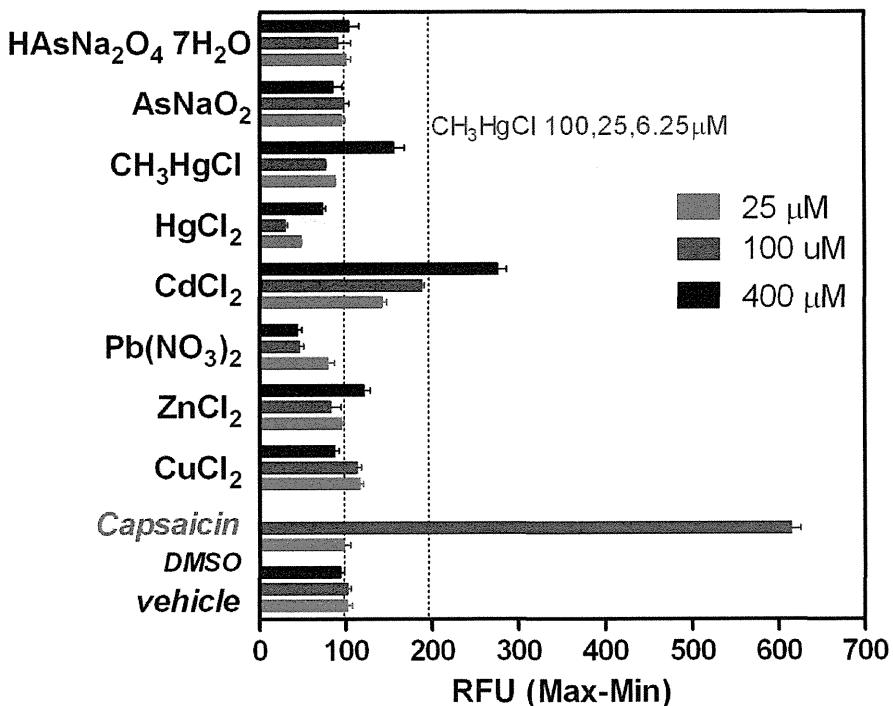


Fig. 29 Activation of hTRPV1 and hTRPA1 by 2-ethyl-1-hexanol.

hTRPV1



hTRPV1

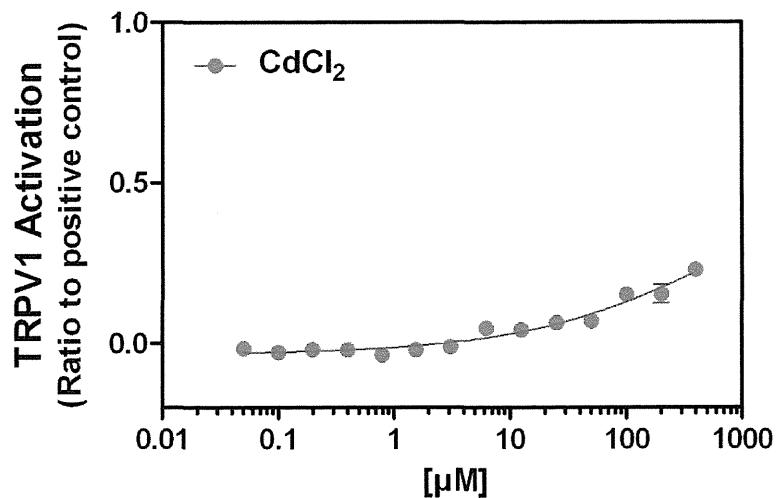
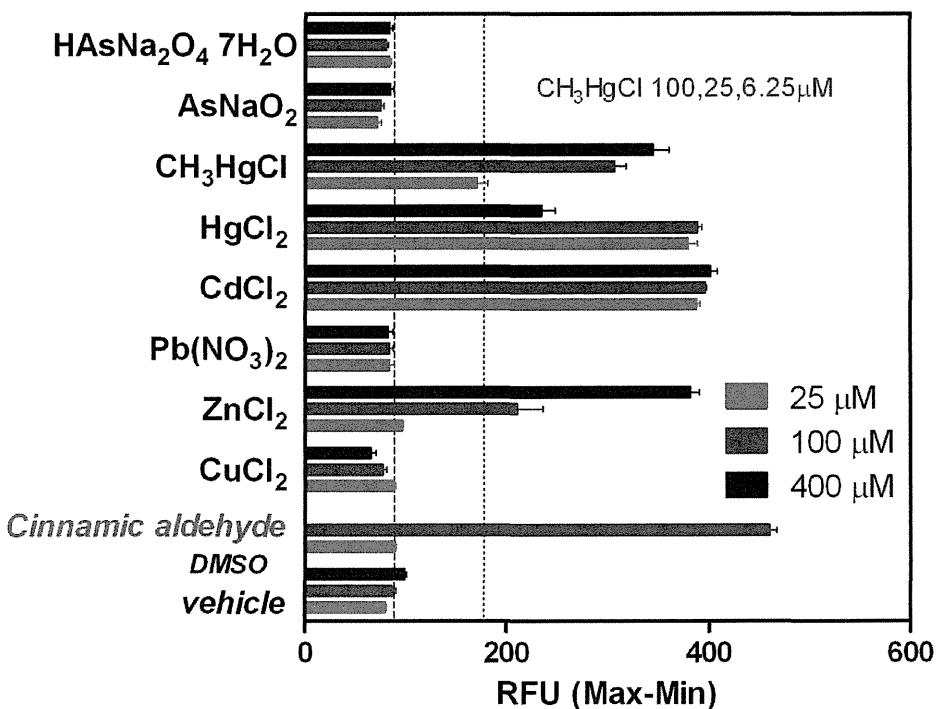


Fig. 30 Activation of hTRPV1 by metal compounds.

hTRPA1



hTRPA1

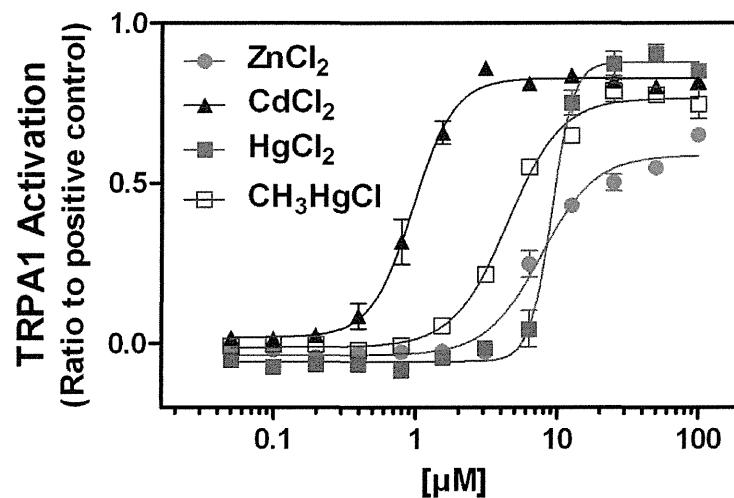
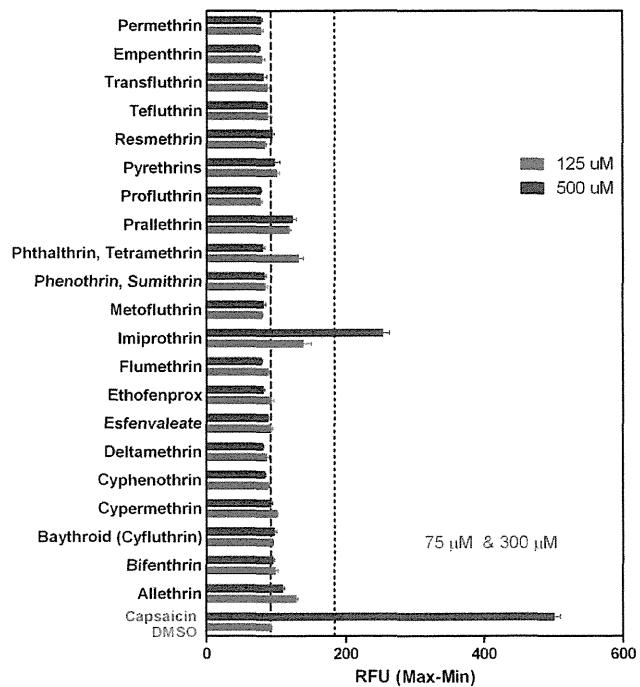


Fig. 31 Activation of hTRPA1 by metal compounds.

hTRPV1



hTRPA1

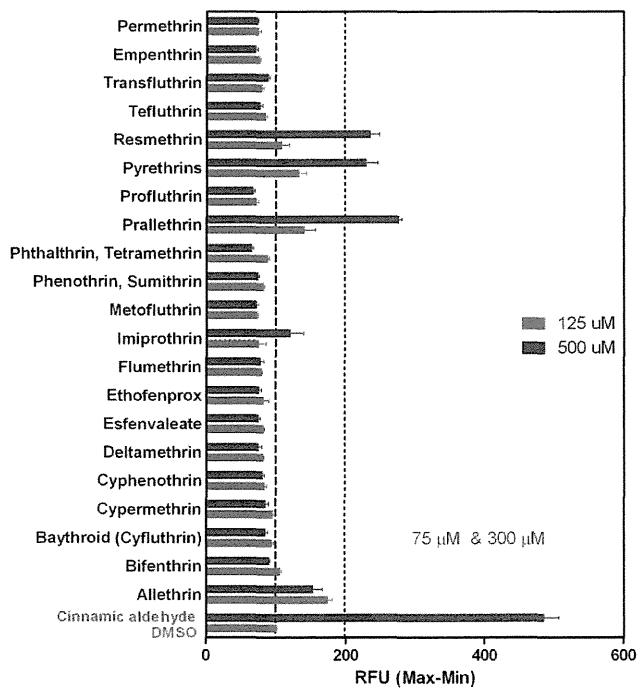
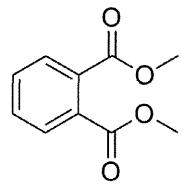
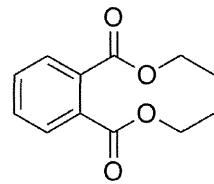


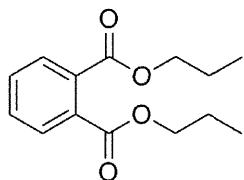
Fig. 32 Activation of hTRPV1 and hTRPA1 by pyrethroids.



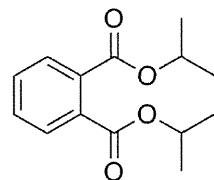
Dimethyl phthalate



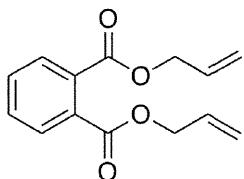
Diethyl phthalate



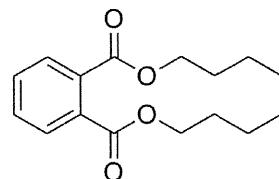
Di-n-propyl phthalate



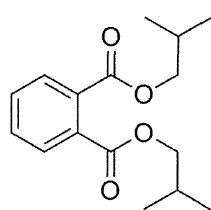
Diisopropyl phthalate



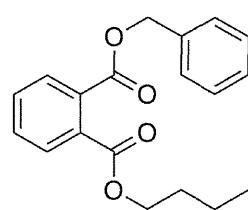
Diallyl phthalate



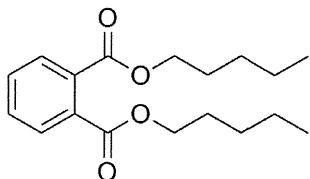
Dibutyl phthalate



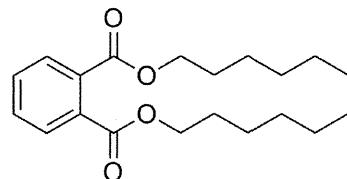
Diisobutyl phthalate



Benzyl butyl phthalate

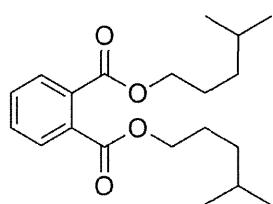


Di-n-pentyl phthalate

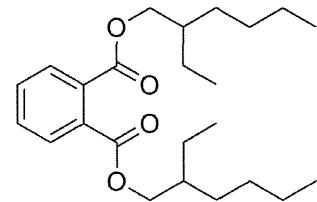


Di-n-hexyl phthalate

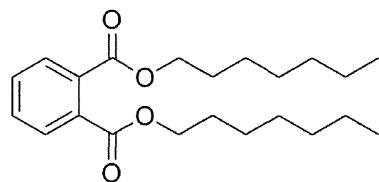
Fig. 33-1 Chemical structures of phthalate diesters assayed in this study.



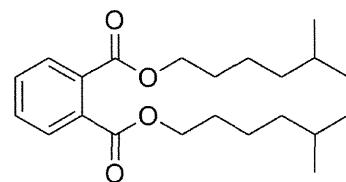
Diisohexyl phthalate



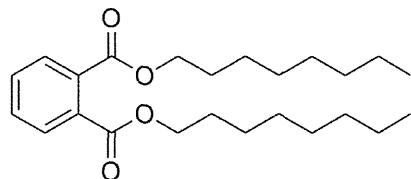
Bis(2-ethylhexyl) phthalate



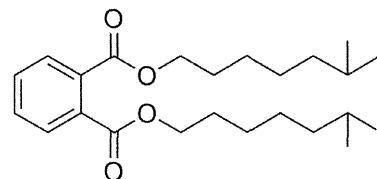
Di-n-heptyl phthalate



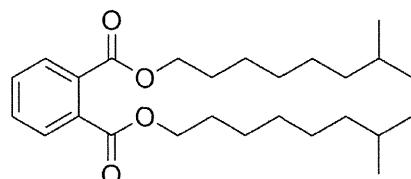
Diisoheptyl phthalate



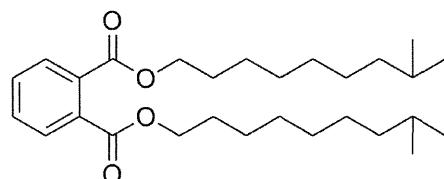
Di-n-octyl phthalate



Diisooctyl phthalate

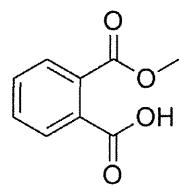


Diisononyl phthalate

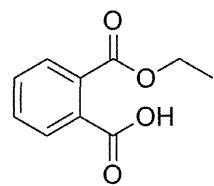


Diisodecyl phthalate

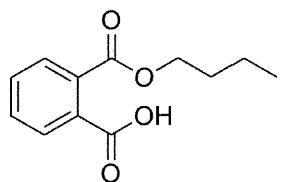
Fig. 33-2 Chemical structures of phthalate diesters assayed in this study.



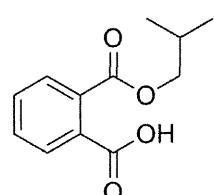
Monomethyl phthalate



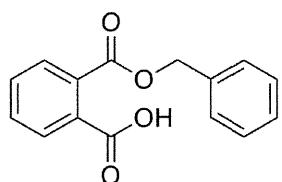
Monoethyl phthalate



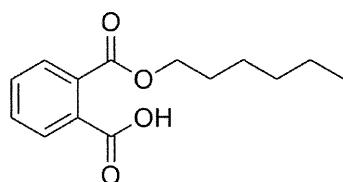
Monobutyl phthalate



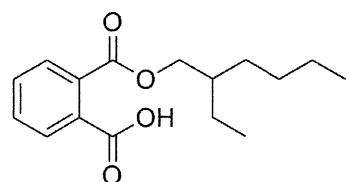
Monoisobutyl phthalate



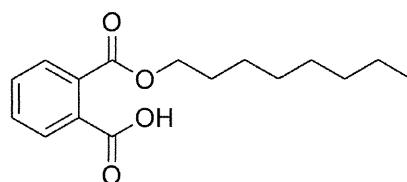
Monobenzyl phthalate



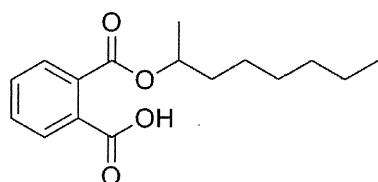
Monohexyl phthalate



Mono(2-ethylhexyl) phthalate

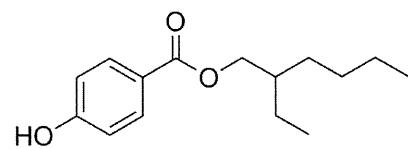


Monoctyl phthalate

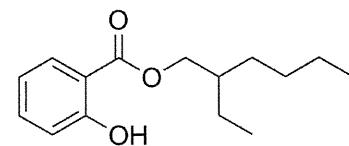


Mono-2-octyl phthalate

Fig. 34 Chemical structures of phthalate monoesters assayed in this study.



2-Ethylhexyl 4-hydroxybenzoate



2-Ethylhexyl salicylate

Fig. 35 Chemical structures of mono(2-ethylhexyl) hydroxybenzoate.

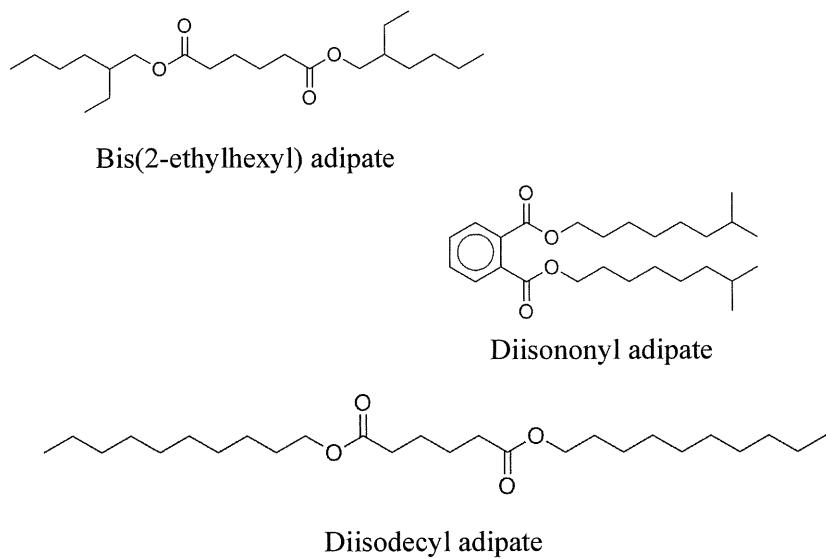


Fig. 36 Chemical structures of adipate esters and its metabolites.

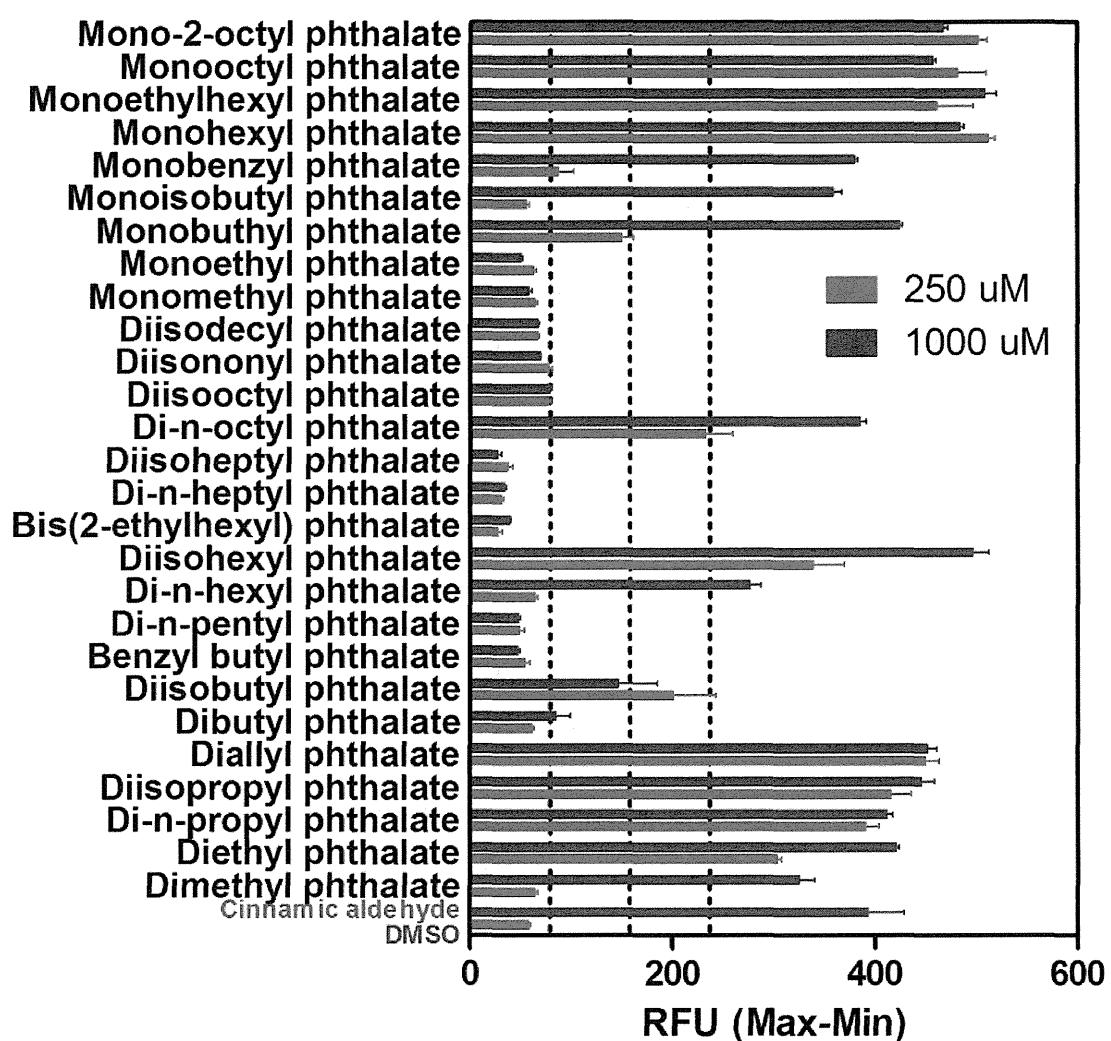


Fig. 37 Activation of hTRPA1 by phthalates.

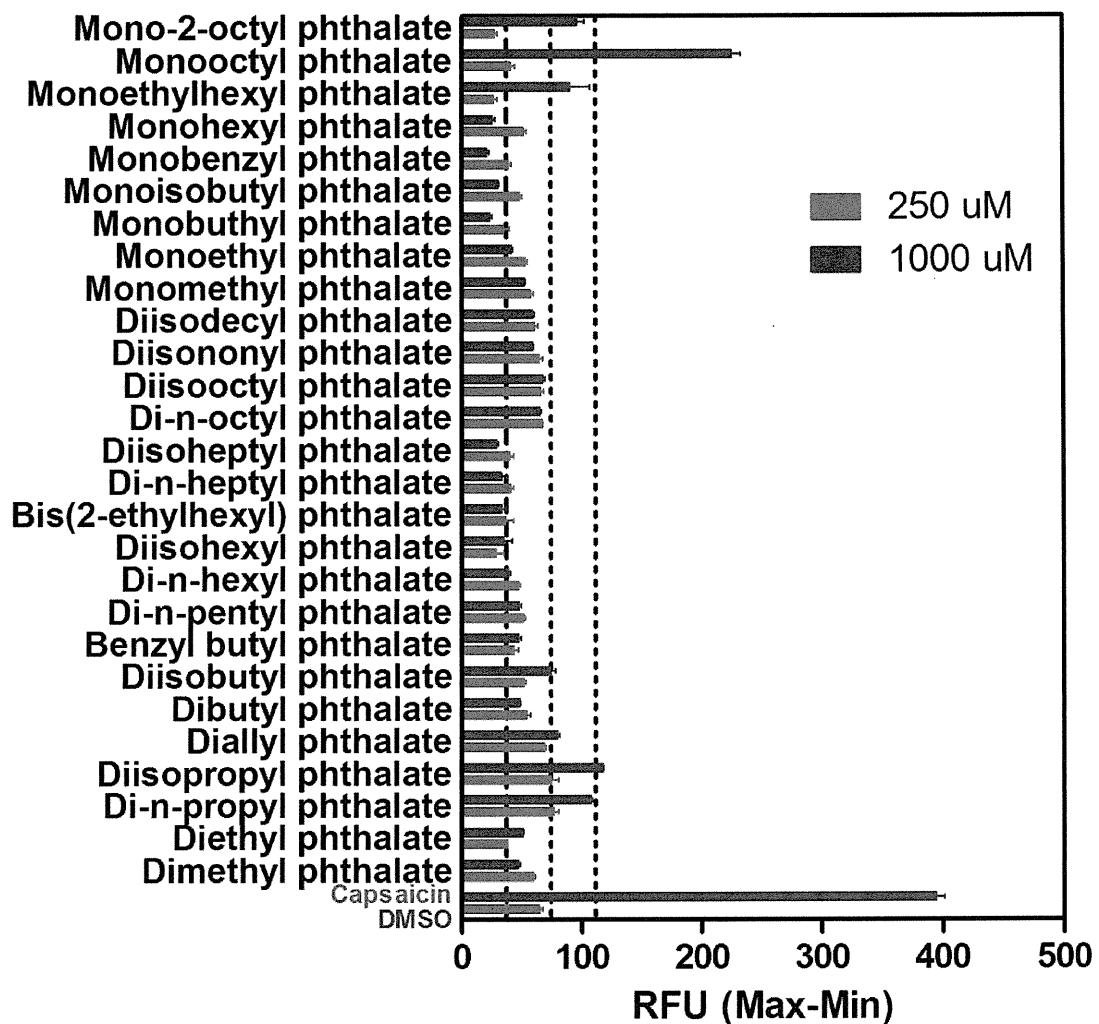


Fig. 38 Activation of hTRPV1 by phthalates.

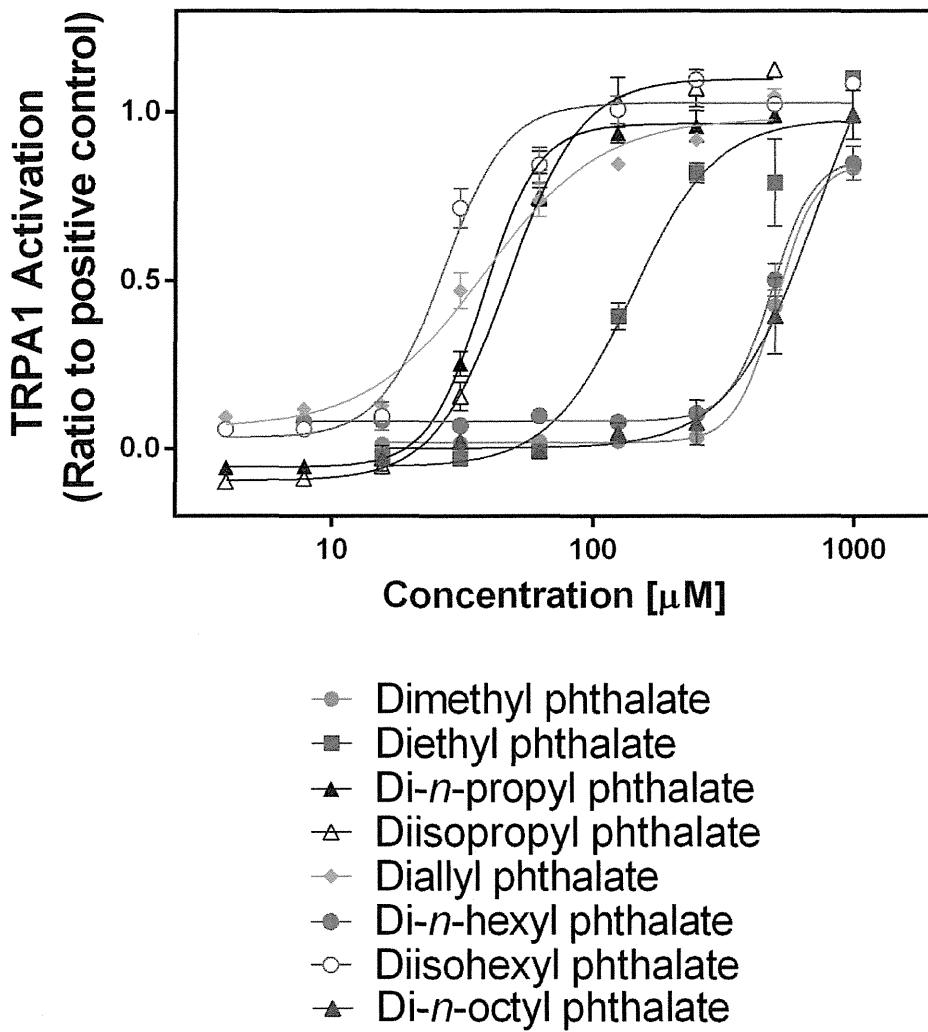


Fig. 39 Dose-dependent activation of hTRPA1 by phthalate diesters.

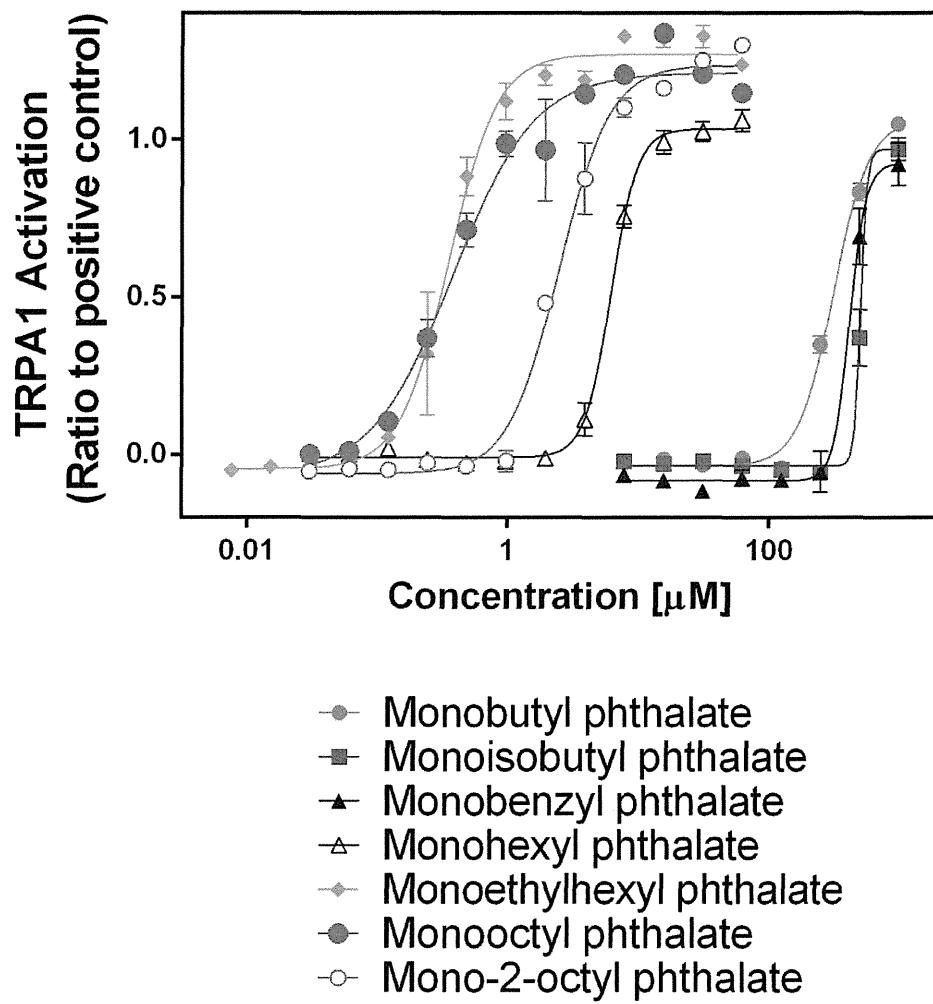
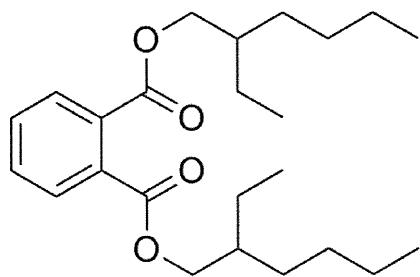
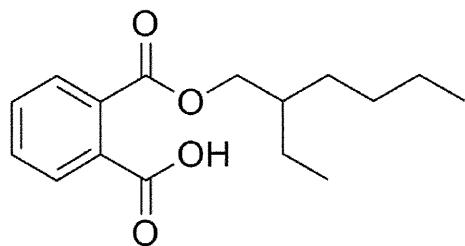


Fig. 40 Dose-dependent activation of hTRPA1 by phthalate monoesters.

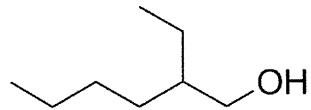


Bis(2-ethylhexyl) phthalate

↓
hydrolysis

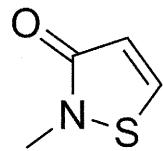


Mono(2-ethylhexyl) phthalate

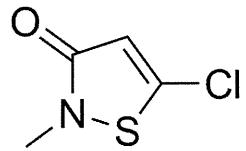


2-Ethyl-1-hexanol

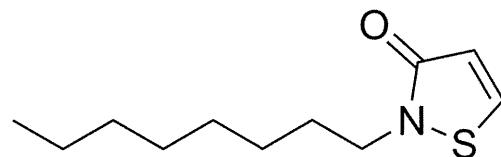
Fig. 41 Hydrolysis of Bis(2-ethylhexyl) phthalate



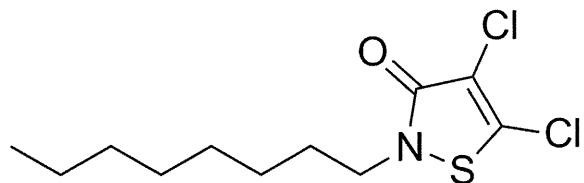
2-Methyl-4-isothiazolin-3-one
(MIT)



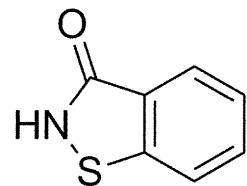
5-Chloro-2-methyl-4-isothiazolin-3-one
(Cl-MIT)



2-*n*-Octyl-4-isothiazolin-3-one (OIT)



4,5-Dichloro-2-*n*-octyl-4-isothiazolin-3-one (2Cl-OIT)



1,2-Benzisothiazolin-3-one (BIT)

Fig. 42 Chemical structures of isothiazolinone derivatives.

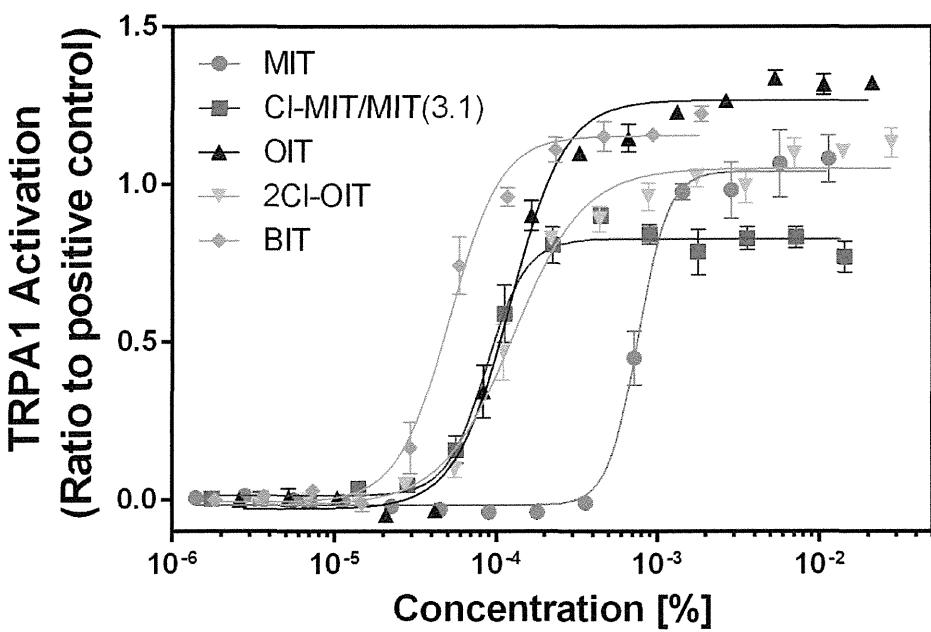
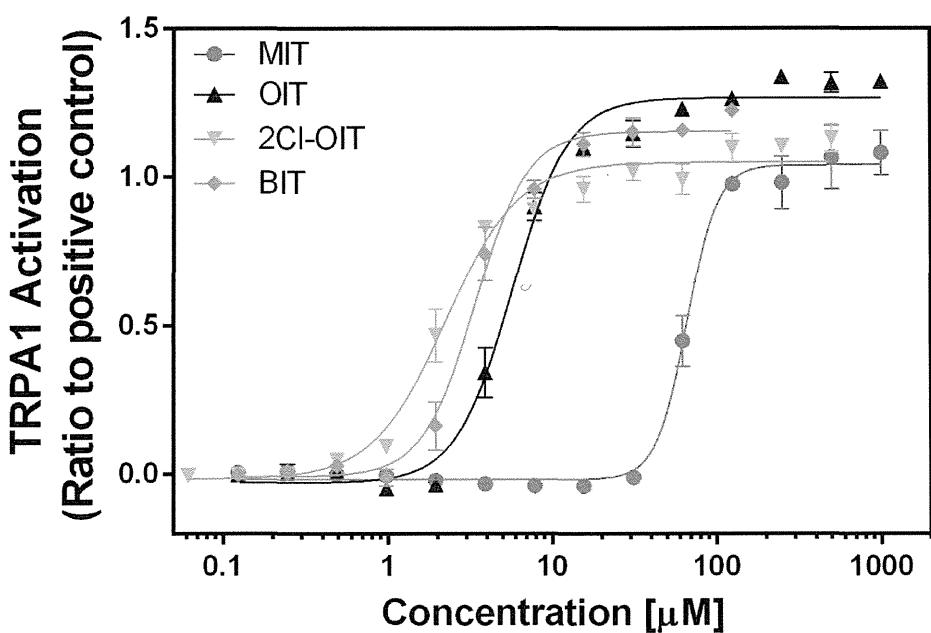


Fig. 43 Activation of hTRPA1 by isothiazolinone derivatives.