Table S1: EC_{50} of OAG and IC_{50} of Inhibitor on hTRPC6 constructs

TRPC6 constructs	OAG		Inhibitor	
	$LogEC_{50}$[a]	EC_{50} (nM)	$LogIC_{50}$[a]	IC_{50} (nM)
TRPC6 WT	3.43±0.06	2,707	1.01±0.07	10
TRPC6 NGFP	3.28±0.08	1,925	1.20±0.07	16
Mutations in CHS binding pocket				
Y392F	3.32±0.09	2,100	1.26±0.11	18
A404C	3.41±0.07	2,589	1.30±0.10	20
F407A	3.25±0.06	1,774	1.13±0.07	13
L408M	3.38±0.09	2,377	1.18±0.07	15
L411F	3.40±0.14	2,494	1.35±0.11	23
A447T	4.02±0.08	10,481	1.07±0.08	12
A447F	3.25±0.05	1,779	1.76±0.13	57
T451F	3.75±0.09	5,684	1.19±0.09	16
T451L	3.29±0.05	1,944	1.35±0.13	22
N617S	3.81±0.10	6,406	0.6±0.08	4
F620L	3.09±0.11	1,227	0.79±0.08	6
Mutations in BTDM binding pocket				
W526A	2.93±0.06	850	2.00±0.14	100
S608L	2.51±0.07	326	-	>10,000[b]
Q624A	3.70±0.07	4,990	3.39±0.16	2,463
I640F	4.07±0.13	11,709	1.62±0.14	42
V644F	2.93±0.03	857	-	>10,000[b]
T714F	3.17±0.10	1,463	3.93±0.17	8,430
Gain of function mutants				
P112Q	3.32±0.69	2,090	1.15±0.07	14
R895C	3.27±0.09	1,852	1.22±0.09	17
E897K	3.48±0.08	2,993	0.97±0.12	9

[a]Data were expressed as $logEC_{50}$ (or $logIC_{50}$)±SEM, n=3.

[b]The highest inhibitor concentration (10,000 nM) inhibited the activation of TRPC6 for less than 30%.