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It's about time: novel drug discovery concepts for the molecular pharmacological characterization fo the cannabinoid CB2 receptor

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List of abbreviations

2-AG	2-arachidonoylglycerol	CINV	Chemotherapy-induced nausea and vomiting
A _{2A} R	Adenosine A _{2A} receptor		
AC	Adenylate cyclase	cLogP	Octanol-water partition coefficient
AD	Alzheimer's disease		
ADGRG1	Adhesion G protein-coupled receptor G1	Cluc	Cypridina luciferase
		CNS	Central nervous system
ADME	Absorption, distribution, metabolism and excretion	COPD	Chronic obstructive pulmonary disease
AEA	N-arachidonylethanolamide, anandamide	CREA	Creatinine
		cryo-EM	Cryo-electron microscopy
Aha1	ATPase homologue 1	C-term	C-terminus
ALS	Amyotrophic lateral sclerosis	CysLTR2	Cysteinyl leukotriene receptor 2
ANOVA	Analysis of variance		
ATP	Adenosine triphosphate	DAGL	Diacylglycerol lipase
AUC	Area under the curve	Δ ⁹ -THC	Delta-9-tetrahydrocannabinol
BAM	Biased allosteric modulator	dpm	Disintegrations per minute
BCA	Bicinchoninic acid	DTT	DL-dithiothreitol
β ₂ AR	β ₂ -adrenoceptor	EA	Enzyme acceptor
B _{max}	Receptor expression level	ebBRET	Enhanced bystander BRET
BRET	Bioluminescence resonance energy transfer	EC ₅₀	Functional potency
		eCBs	Endocannabinoids
BUN	Blood urea nitrogen	ECL	Extracellular loops
cAMP	Cyclic adenosine monophosphate	ECS	Endocannabinoid system
		ELISA	Enzyme-linked immunosorbent assay
CaR	Calcium-sensing receptor		
CB ₁ R	Cannabinoid CB ₁ receptor	E _{max}	Efficacy
CB ₂ R	Cannabinoid CB ₂ receptor	ERK1/2	Extracellular signal-related kinase 1 and 2
CBD	Cannabidiol		
CBD-DMH	Cannabidiol-dimethylheptyl	ET	Engagement time
CBGluc	Click beetle green luciferase	EYFP	Enhanced yellow fluorescent protein
CBlue	Click beetle luciferase		
CBN	Cannabinol	f.c.	Final concentration
CBR	Cannabinoid receptor	FAAH	Fatty-acid amide hydrolases
CBRLuc	Click beetle red luciferase	FCS	Fetal calf serum
CCR2	CC chemokine receptor 2	FDA	Food and Drug Administration
CHO	Chinese hamster ovary	Fluc	Firefly luciferase

List of abbreviations

FSK	Forskolin	MAPK	Mitogen-activated protein kinase
GDC	Genomic Data Commons	MS	Multiple sclerosis
GDP	Guanosine diphosphate	NAL	Neutral allosteric ligands
GFP	Green fluorescent protein	NAM	Negative allosteric modulator
GIRK	G protein-coupled Inward Rectifying K ⁺ -channel	NanoBiT	NanoLuc Binary Technology
Gluc	Gaussia luciferase	NAPE-PLD	N-acylphosphatidylethanolamine-specific phospholipase D
GPCR	G protein-coupled receptor	NFAT	Nuclear factor of activated T cells
GRK	G protein-coupled receptor kinase	NLuc	NanoLuc luciferase
GTP	Guanosine triphosphate.	NSB	Non-specific binding
HBSS	Hank's Balanced Salt Solution	N-term	N-terminus
HEK293T	Human embryonic kidney 293 T	NTS	Neurotensin
HER2	Human epidermal growth factor 2	NTSR1	Neurotensin receptor 1
hiPSC	Human induced pluripotent stem cells	PAM	Positive allosteric modulator
Hsp90	Heat shock protein 90	PAMPA	Passive membrane permeability assay
IBMX	3-isobutyl-1-methylxanthine	PAS	Periodic Acid-Schiff
IBS	Inflammatory bowel disease	PBS	Phosphate buffered saline
IC ₅₀	Half-maximal inhibitory concentration	PD	Parkinson's disease
ICL	Intracellular loops	PDB	Protein Data Bank
IR ₅₀	Kinetic potency	PDE	Phosphodiesterase
IR _{max}	Kinetic efficacy	PK	Prolink
K _D	Kinetic affinity	PMSF	Phenylmethylsulfonyl fluoride
K _i	Inhibition constant	PTM	Post-translational modification
KO	Knockout	PTX	Pertussis Toxin
k _{obs}	Observed association rate constant	Rab	Rab-GTPase
k _{off}	Dissociation rate constant	Rluc	Renilla luciferase
k _{on}	Association rate constant	RMSD	Root mean square deviation
LgBiT	Large BiT	RT	Residence time
LIMBA	Lipid Membrane Binding Assay	rt	Room temperature
LogD	Octanol/water distribution coefficient	S1P ₁	Sphingosine-1-phosphate receptor 1
MAGL	Monoacylglycerol lipase	SD	Standard deviation
		SEM	Standard error of the mean
		SmBiT	Small BiT
		SRF	Serum response factor
		TB	Total binding
		TBS	Tris-buffered saline
		TBST	Tris-buffered saline TWEEN 20

TM	Transmembrane
TMB	3,3',5,5'-Tetramethylbenzidine
UVM	Uveal melanoma
WT	Wild type
YFP	Yellow fluorescent protein

