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Activity-based proteomics of the endocannabinoid system

Rooden, E.J. van

Citation

Rooden, E. J. van. (2018, September 11). *Activity-based proteomics of the endocannabinoid system*. Retrieved from <https://hdl.handle.net/1887/65174>

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Author: Rooden, E.J. van

Title: Activity-based proteomics of the endocannabinoid system

Issue Date: 2018-09-11

Activity-based proteomics of the endocannabinoid system

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C. J. J. M. Stolker,
volgens het besluit van het College voor Promoties
te verdedigen op 11 september 2018
klokke 15.00 uur

door

Eva Jacoba van Rooden

Geboren te Leiden in 1990

Promotiecommissie

Promotoren	Prof. dr. M. van der Stelt Prof. dr. H. S. Overkleeft
Overige leden	Prof. dr. J. M. F. G. Aerts Prof. dr. J. Brouwer Prof. dr. F. J. Dekker Prof. dr. G. A. van der Marel Dr. L. Willems

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Abbreviations

AA	arachidonic acid
ABP	activity-based probe
ABPP	activity-based protein profiling
ACN	acetonitrile (CH ₃ CN)
AEA	anandamide
2-AG	2-arachidonoylglycerol
aq.	aqueous
BOC	bioorthogonal chemistry
BODIPY	boron-dipyrromethene
BSA	bovine serum albumin
CB	cannabinoid receptor
CE-LIF	capillary electrophoresis - laser-induced fluorescence
CNS	central nervous system
CuAAC	copper(I)-catalyzed azide-alkyne [2 + 3] cycloaddition
DAGL	diacylglycerol lipase
Da	dalton
DCE	1,2-dichloroethane
DCM	dichloromethane (CH ₂ Cl ₂)
DDA	data-dependent acquisition
DDQ	2,3-dichloro-5,6-dicyano-p-benzoquinone
DFT	density functional theory
DIA	data-independent acquisition
DIPEA	<i>N,N</i> -diisopropylethylamine
DMAP	4-(dimethylamino)pyridine
DMF	<i>N,N</i> -dimethylformamide
DMSO	dimethyl sulfoxide ((CH ₃) ₂ SO)
DNA	deoxyribonucleic acid
DTT	1,4-dithiothreitol
ECS	endocannabinoid system
EDC	1-ethyl-3-(3-dimethylaminopropyl)carbodiimide
ESI	electrospray ionization
EtOAc	ethyl acetate
FA	formic acid (HCOOH)
FAAH	fatty acid amide hydrolase
FDR	false discovery rate
FluoPol	fluorescence polarization
FP	fluorophosphonate
<i>g</i>	<i>g</i> force (relative centrifugal force)
GluFib	[Glu ¹]-fibrinopeptide B
h	hour
HEPES	4-(2-hydroxyethyl)piperazine-1-ethanesulfonic acid
HPLC	high-performance liquid chromatography
HRMS	high-resolution mass spectrometry
HRP	horseradish peroxidase
IAA	iodoacetamide

IEDDA	inverse electron-demand Diels-Alder
IMS	ion mobility separation
KO	knockout
l	liquid
LC	liquid chromatography
MAGL	monoacylglycerol lipase
min	minutes
MS	mass spectrometry
<i>m/z</i>	mass divided by charge number
NAAA	N-acylethanolamine-hydrolyzing acid amidase
NAE	N-acyl ethanolamide
NAPE	N-arachidonoyl phosphatidylethanolamine
NMR	nuclear magnetic resonance
NPC	Niemann-Pick type C
o/n	overnight
PAGE	polyacrylamide gel electrophoresis
PBS	phosphate buffered saline
PE	phosphatidylethanolamine
PEI	polyethylenimine
PLA2G4E	phospholipase A2 group IVE
PLA/AT	phospholipase A/acyltransferase
PLC	phospholipase C
PLD	phospholipase D
PTM	post-translational modification
PTPN22	protein-tyrosine phosphatase non-receptor type 22
qTOF	quadrupole time-of-flight
R_f	retardation factor
rpm	revolutions per minute
rt	room temperature (18 - 24 °C)
sat.	saturated
SDS	sodium dodecyl sulfate
sec	seconds
SHIP1	SH2 domain-containing inositol 5'-phosphatase
sPLA2	secretory phospholipase A2
TBS	tris buffered saline
TFA	trifluoroacetic acid (CF ₃ COOH)
THC	Δ ⁹ -tetrahydrocannabinol
THF	tetrahydrofuran
THL	tetrahydrolipstatin
TLC	thin-layer chromatography
TMS	trimethylsilyl (CH ₃ Si-)
tris	2-amino-2-(hydroxymethyl)propane-1,3-diol
v	volume
w	weight
WT	wildtype

