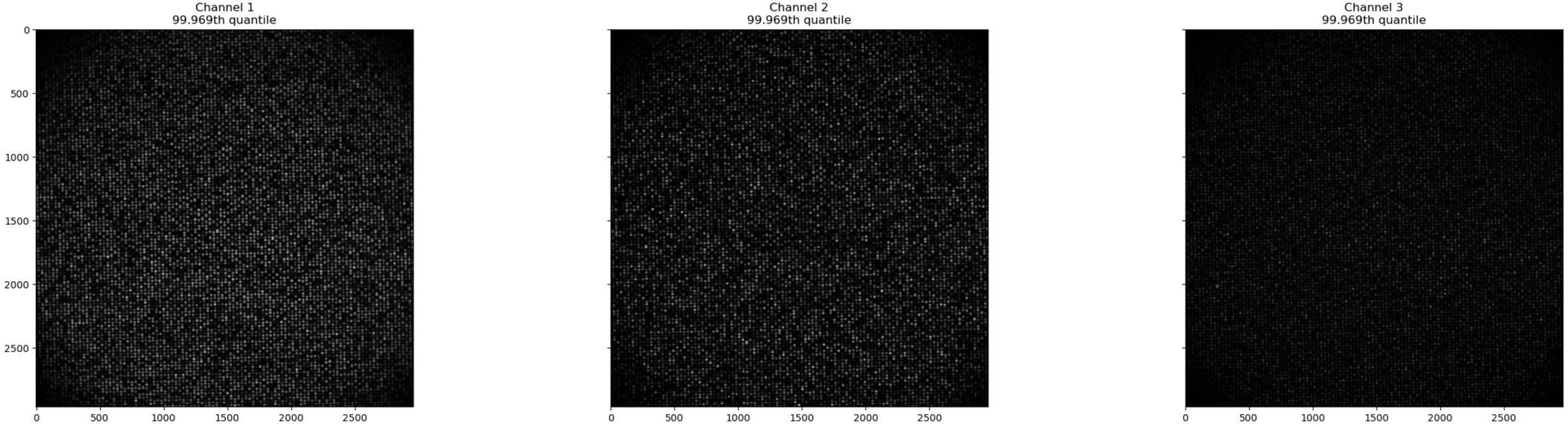
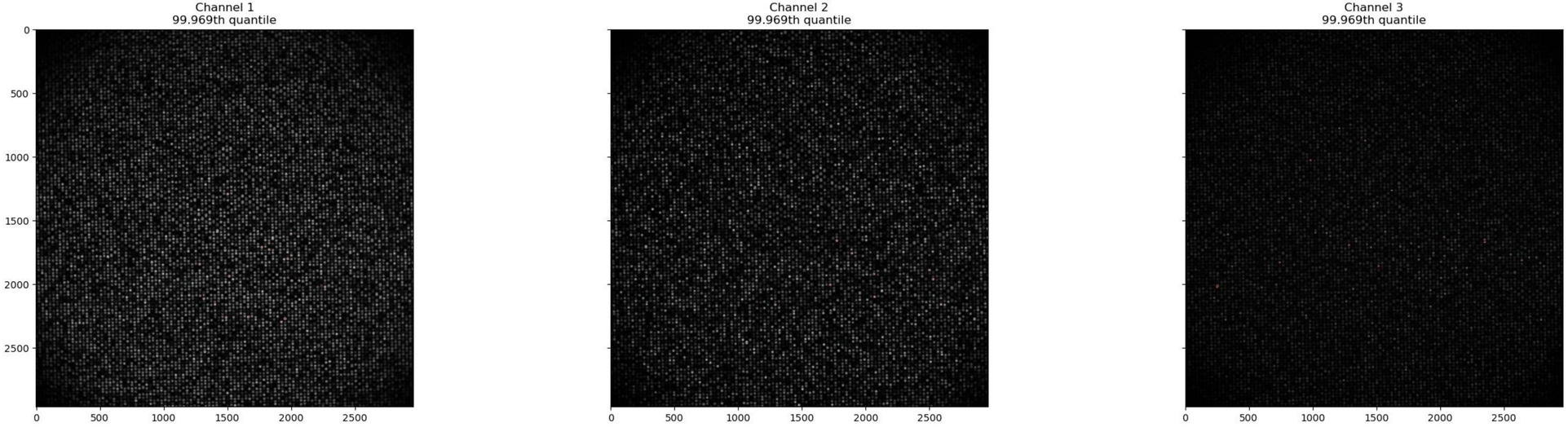
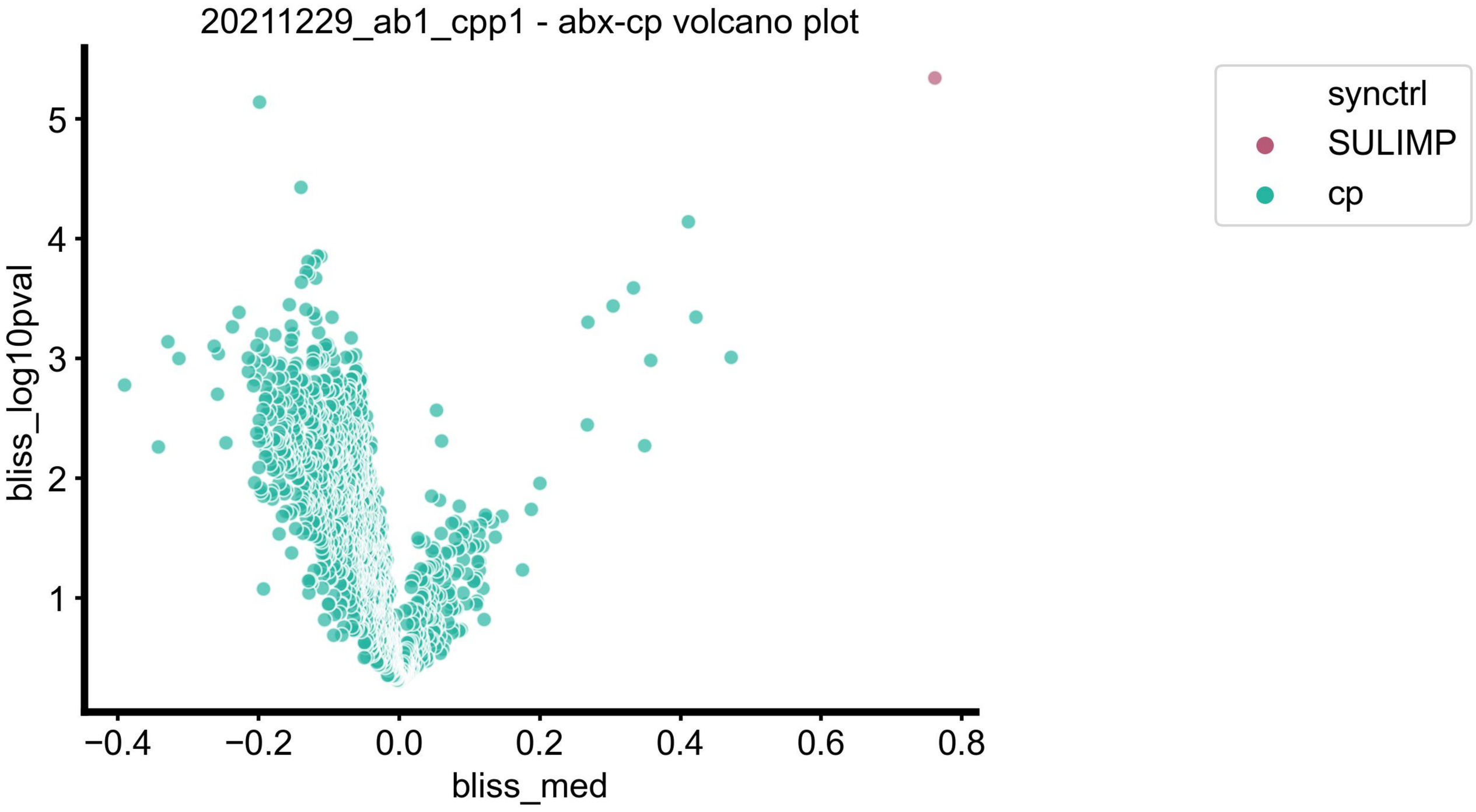
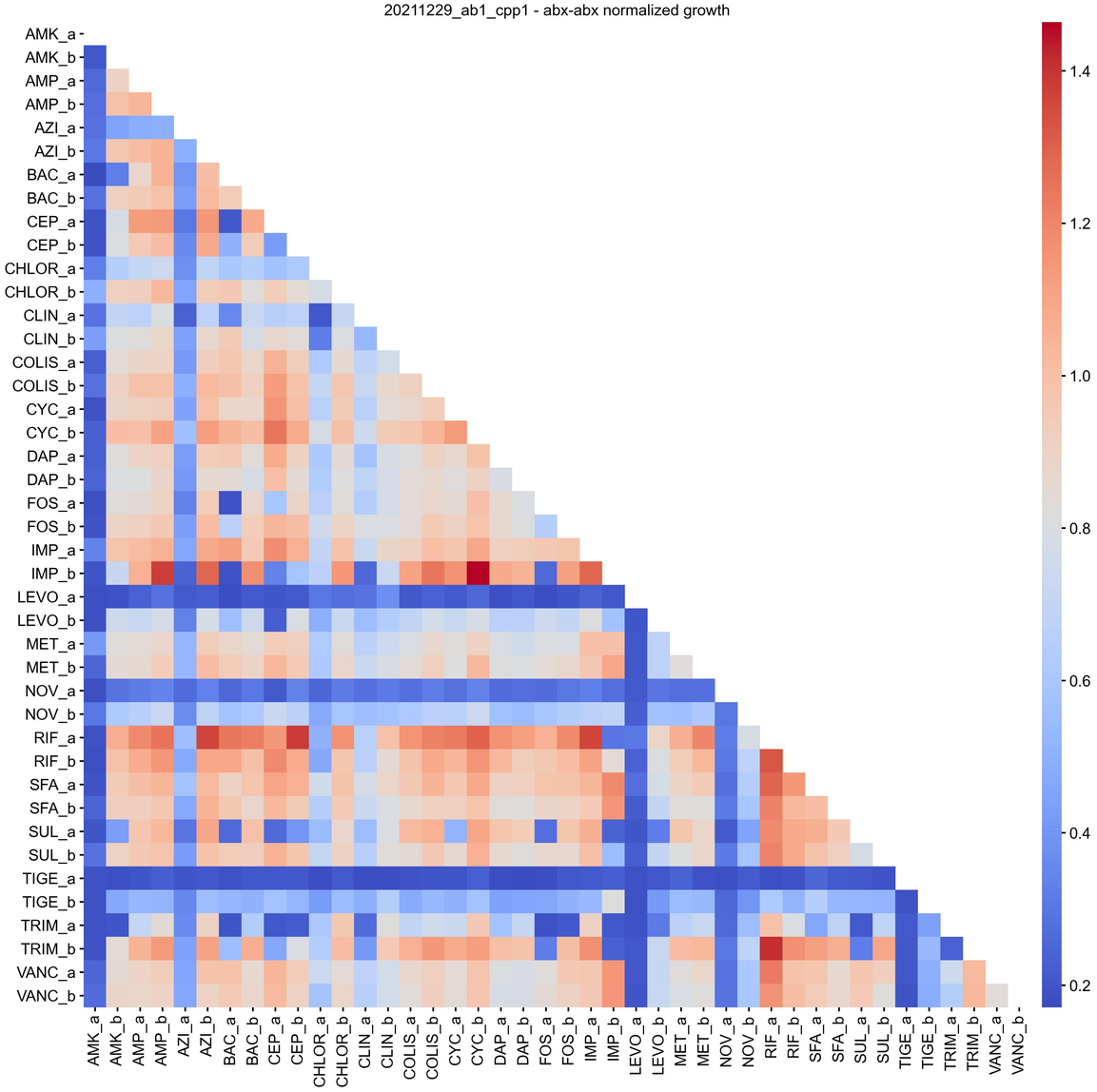
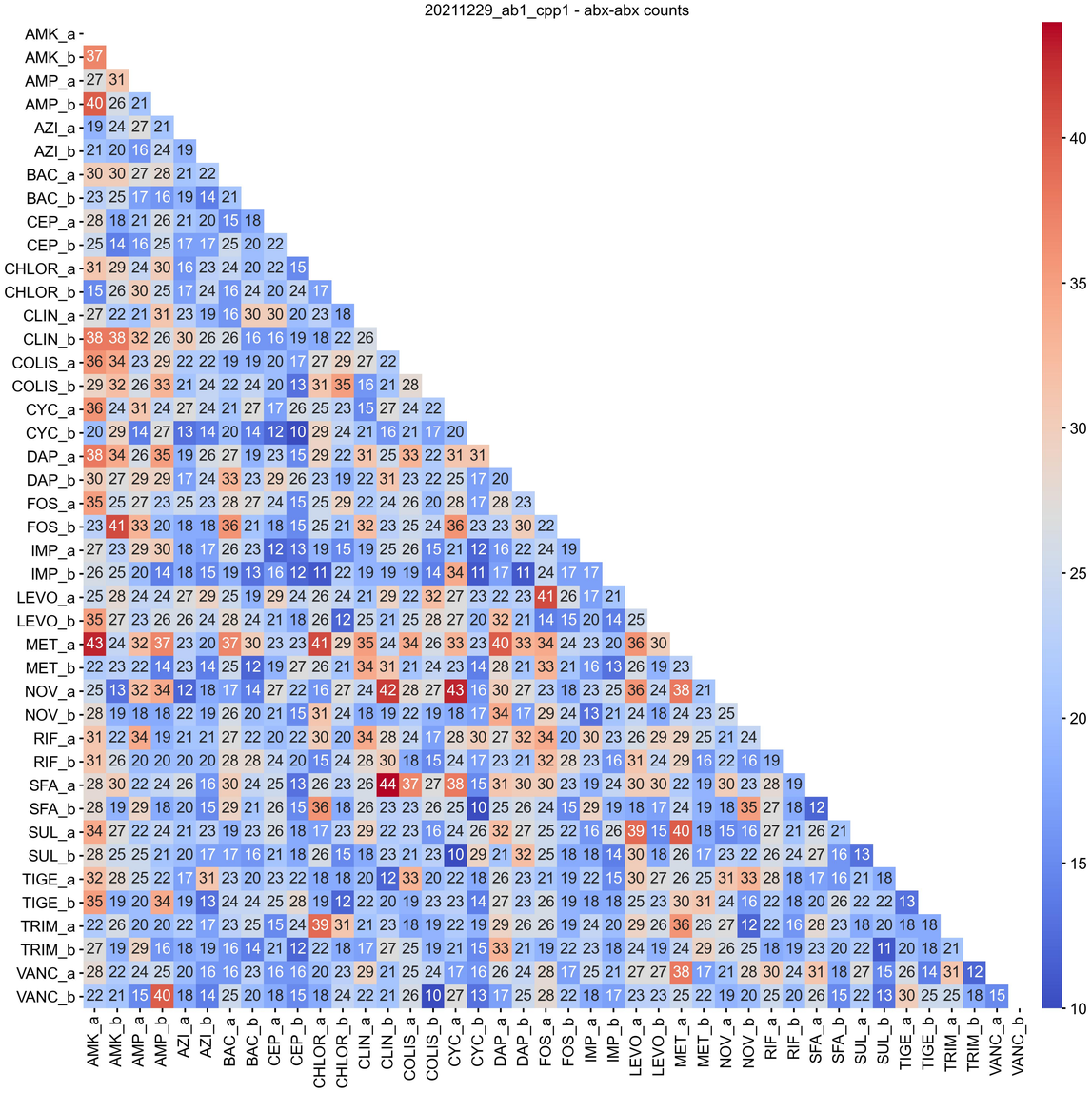

Channel 1
99.969th quantile
Channel 2
99.969th quantile
Channel 3
99.969th quantile
0
500
1000
1500
2000
2500

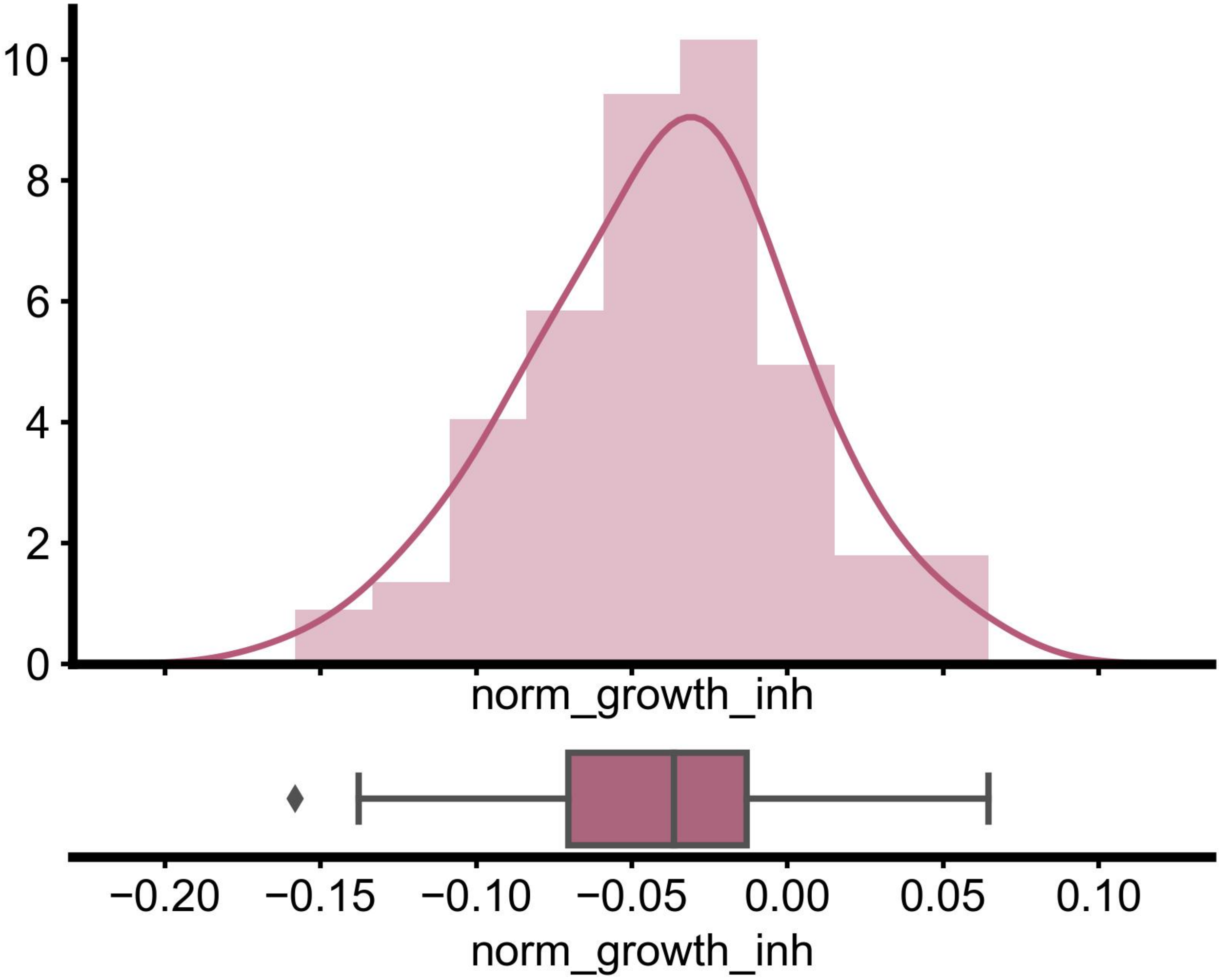

Channel 1
99.969th quantile
Channel 2
99.969th quantile
Channel 3
99.969th quantile
0
500
1000
1500
2000
2500

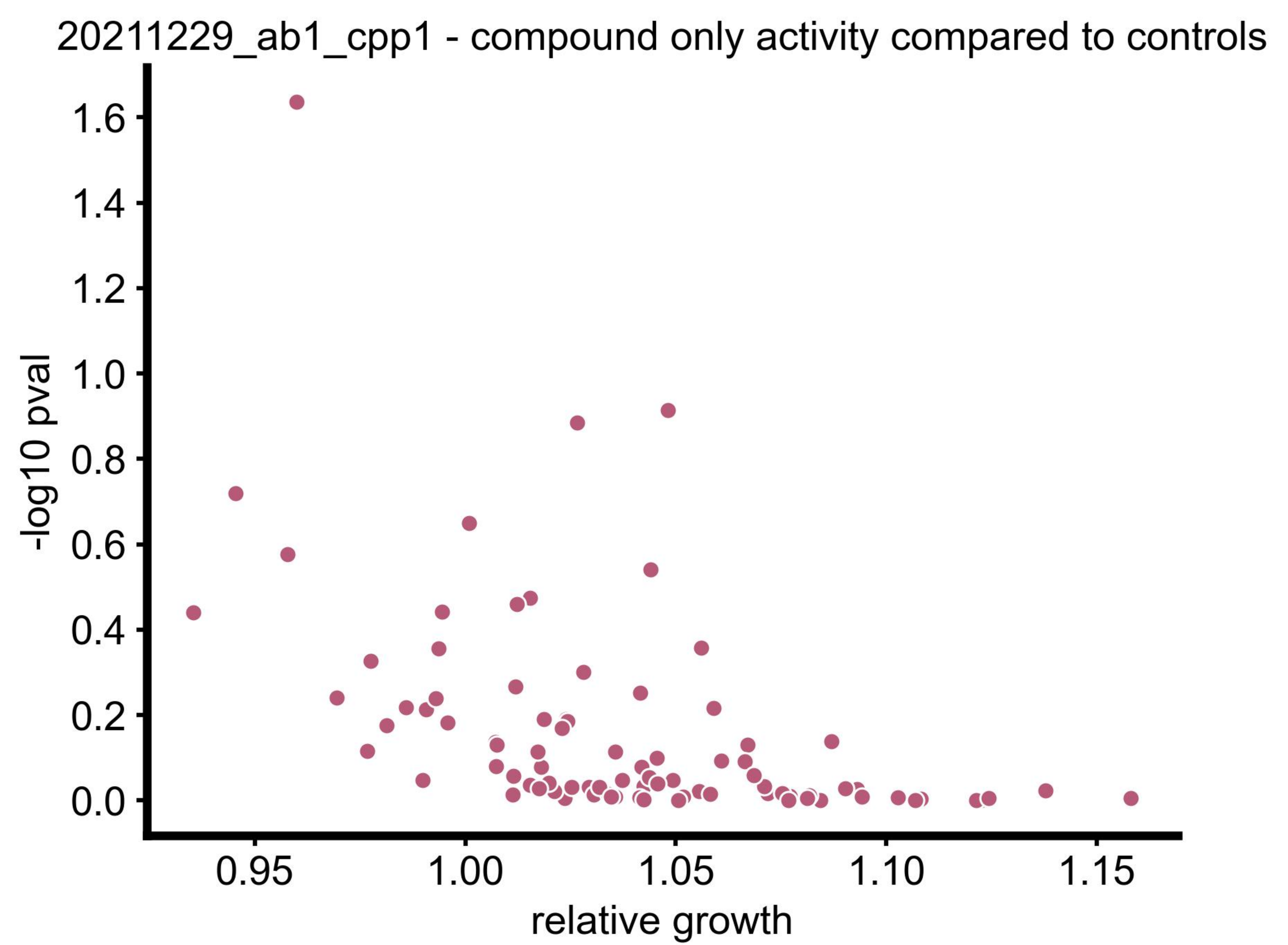

20211229_ab1_cpp1 - abx-cp volcano plot
bliss_log10pval
bliss_med
5
4
3
2
1
−0.4
−0.2
0.0
0.2
0.4
0.6
0.8
synctrl
SULIMP
cp

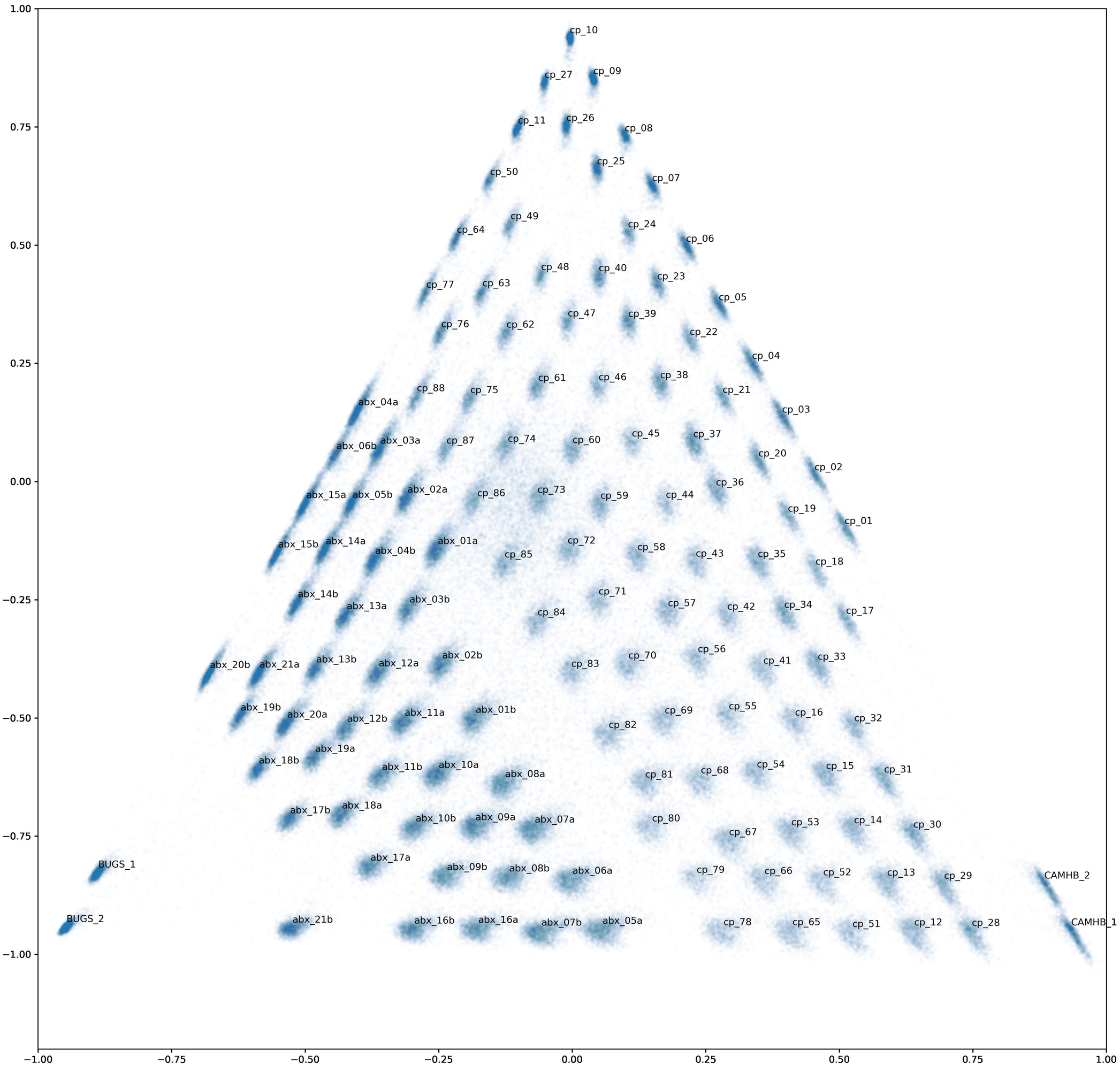

20211229_ab1_cpp1 - abx-abx normalized growth
AMK_a
AMK_b
AMP_a
AMP_b
AZI_a
AZI_b
BAC_a
BAC_b
CEP_a
CEP_b
CHLOR_a
CHLOR_b
CLIN_a
CLIN_b
COLIS_a
COLIS_b
CYC_a
CYC_b
DAP_a
DAP_b
FOS_a
FOS_b
IMP_a
IMP_b
LEVO_a
LEVO_b
MET_a
MET_b
NOV_a
NOV_b
RIF_a
RIF_b
SFA_a
SFA_b
SUL_a
SUL_b
TIGE_a
TIGE_b
TRIM_a
TRIM_b
VANC_a
VANC_b
1.4
1.2
1.0
0.8
0.6
0.4
0.2

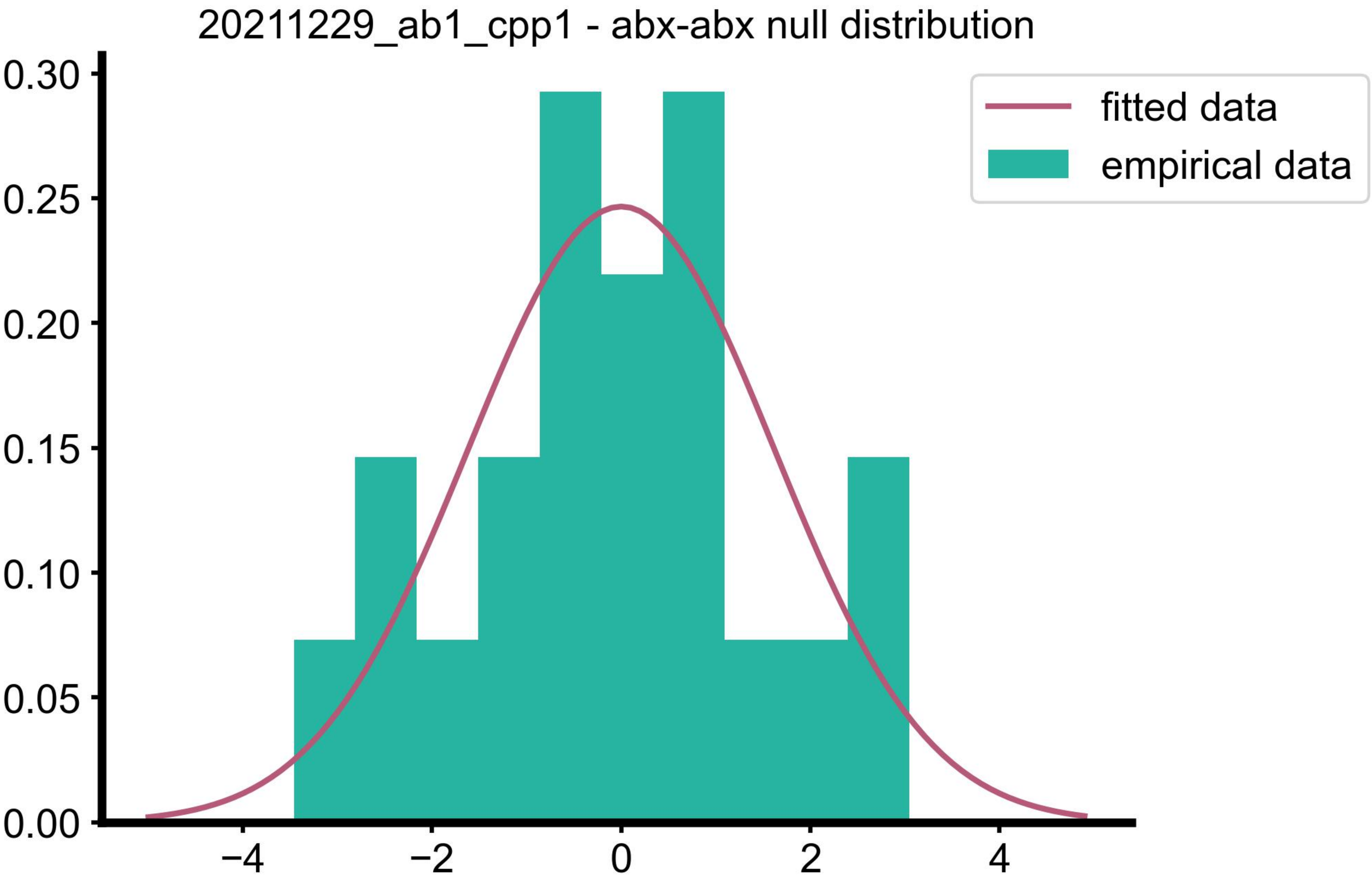

20211229_ab1_cpp1 - abx-abx counts
AMK_a
AMK_b
AMP_a
AMP_b
AZI_a
AZI_b
BAC_a
BAC_b
CEP_a
CEP_b
CHLOR_a
CHLOR_b
CLIN_a
CLIN_b
COLIS_a
COLIS_b
CYC_a
CYC_b
DAP_a
DAP_b
FOS_a
FOS_b
IMP_a
IMP_b
LEVO_a
LEVO_b
MET_a
MET_b
NOV_a
NOV_b
RIF_a
RIF_b
SFA_a
SFA_b
SUL_a
SUL_b
TIGE_a
TIGE_b
TRIM_a
TRIM_b
VANC_a
VANC_b
40
35
30
25
20
15
10

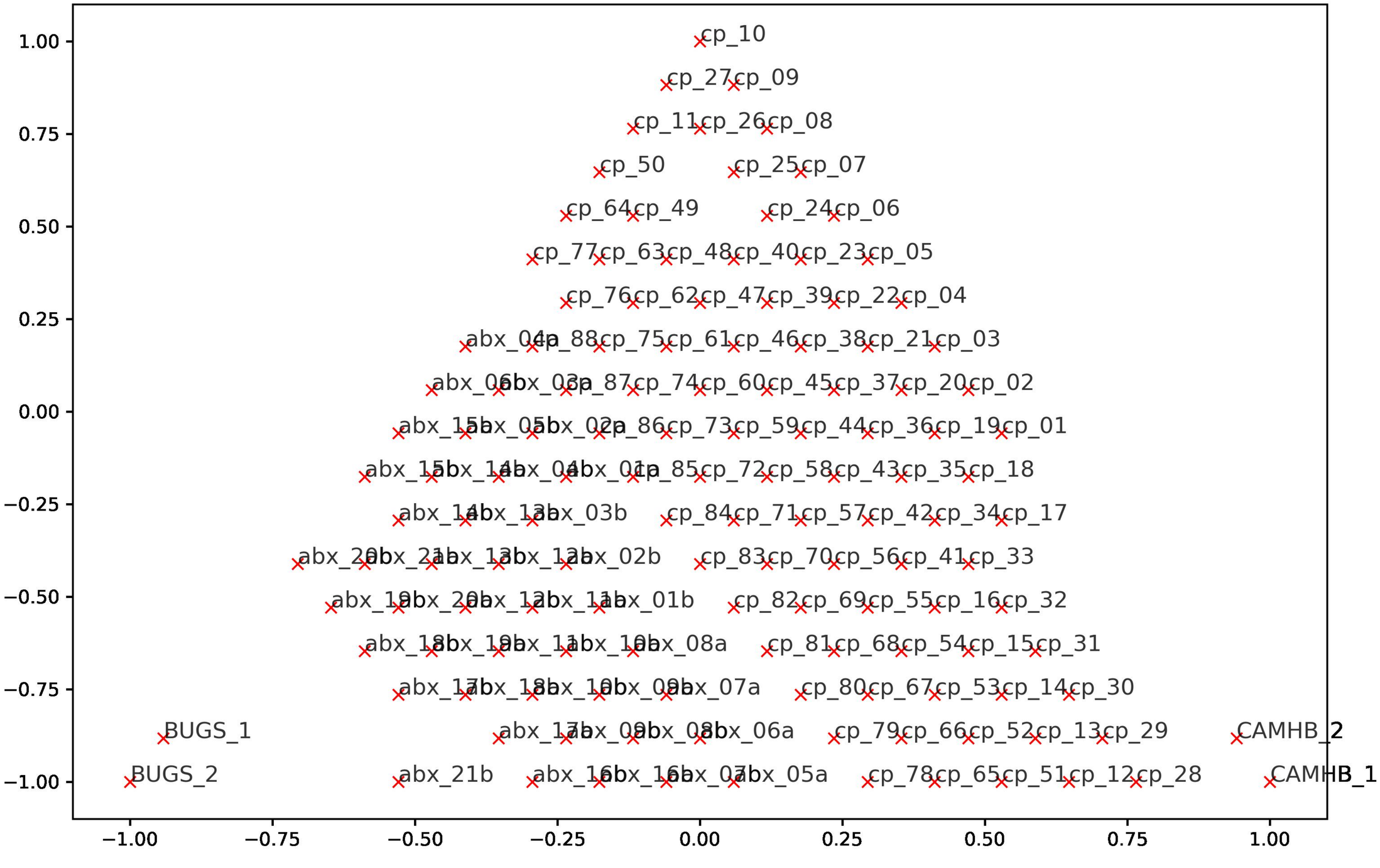
20211229_ab1_cpp1 - compound only activity

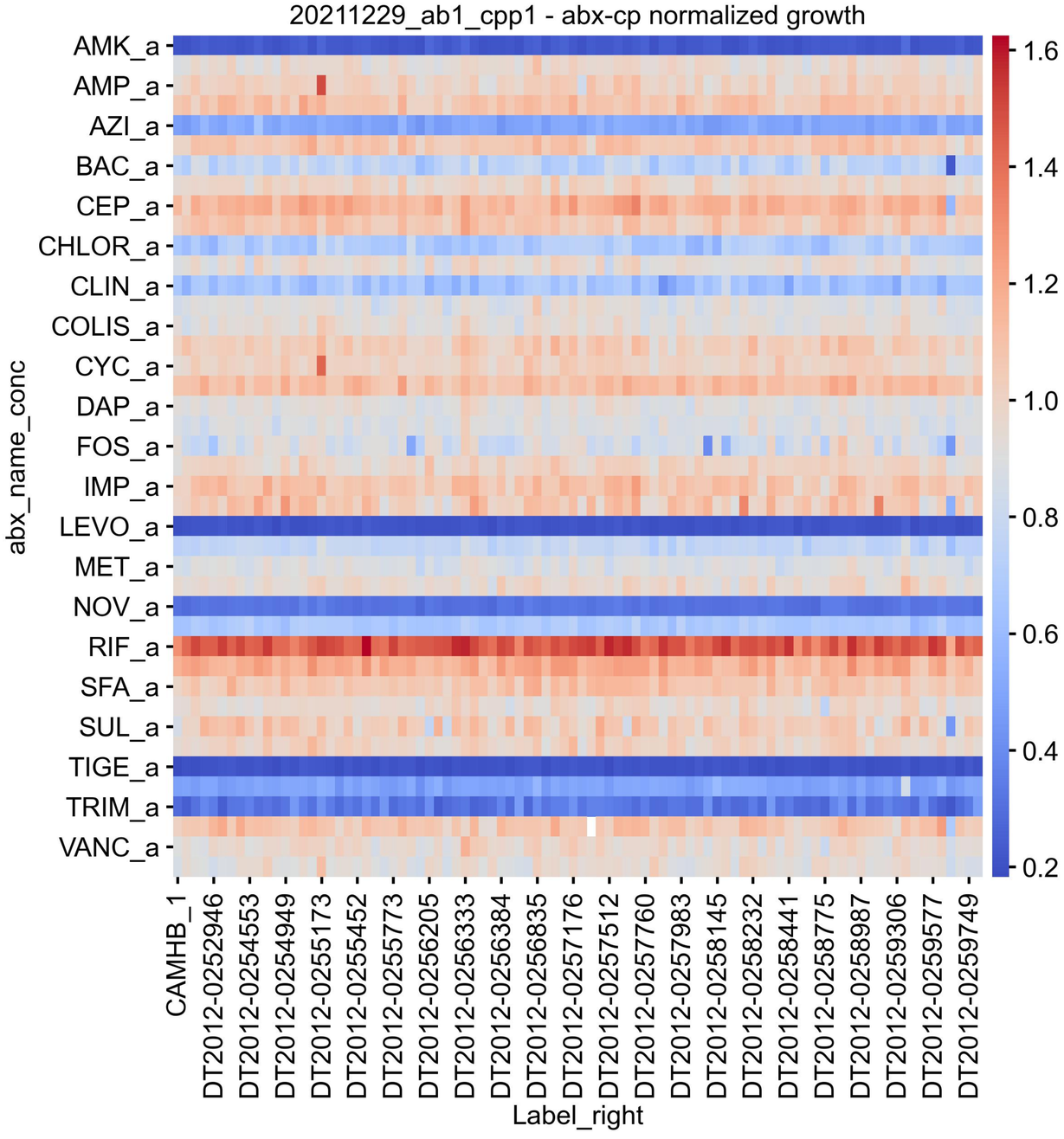


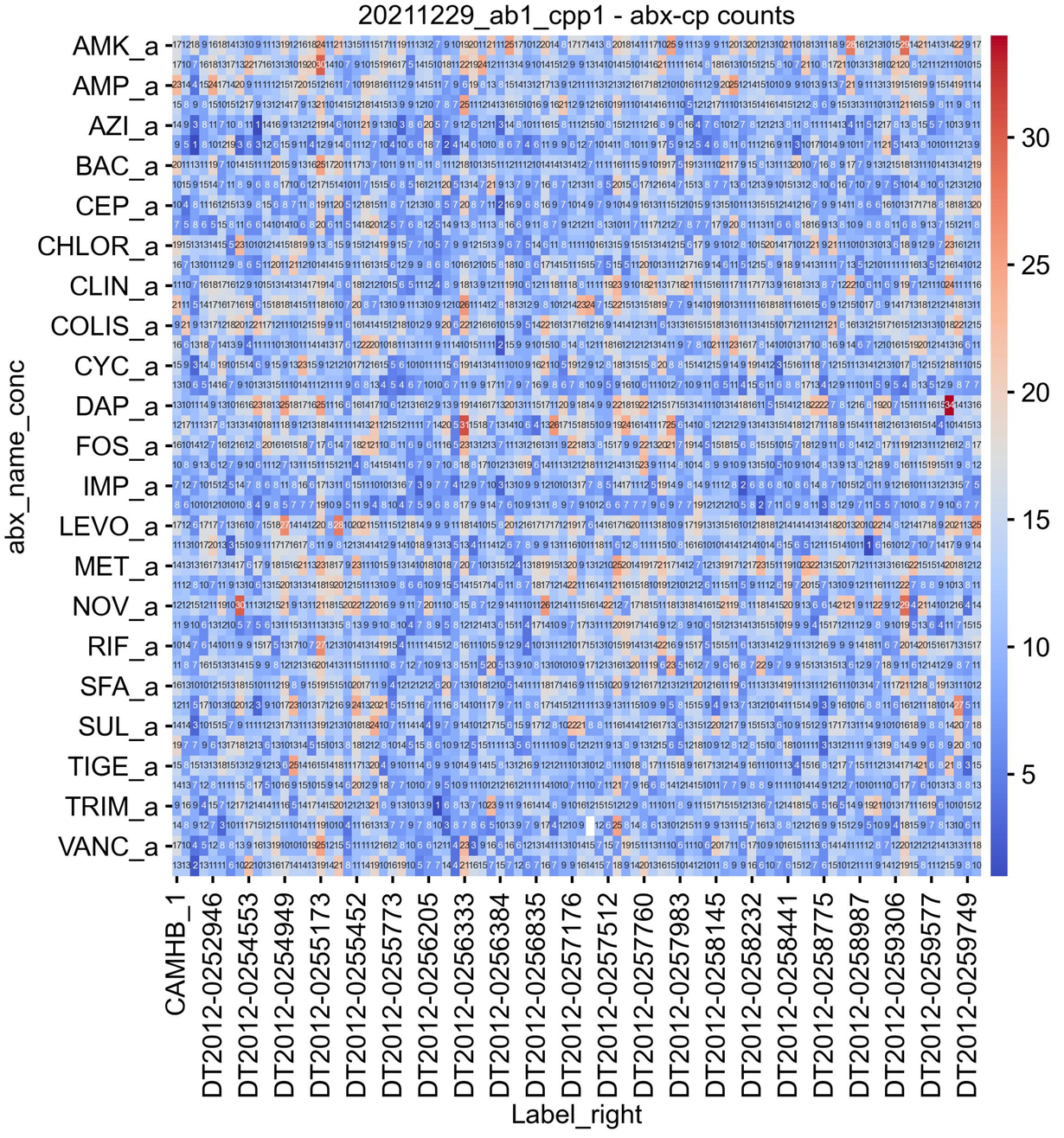

20211229_ab1_cpp1 - compound only activity compared to controls
-log10 pval
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.95
1.00
1.05
1.10
1.15
relative growth

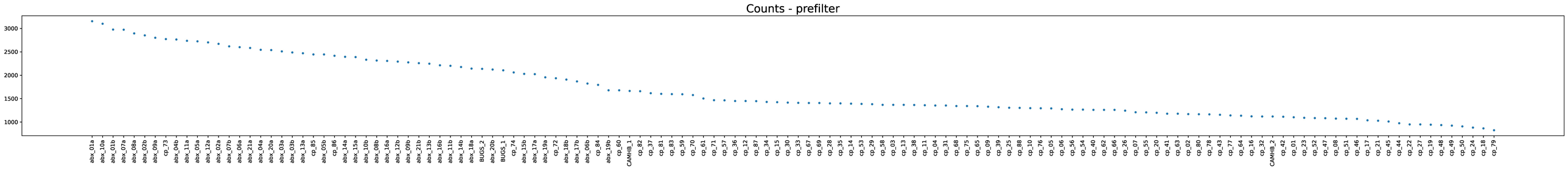

1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
cp_10
cp_27
cp_09
cp_11
cp_26
cp_08
cp_25
cp_50
cp_07
cp_49
cp_64
cp_24
cp_06
cp_48
cp_40
cp_23
cp_77
cp_63
cp_05
cp_47
cp_39
cp_76
cp_62
cp_22
cp_04
cp_61
cp_46
cp_38
cp_88
cp_75
cp_21
abx_04a
cp_03
cp_45
cp_37
abx_06b
abx_03a
cp_87
cp_74
cp_60
cp_20
cp_02
cp_36
abx_15a
abx_05b
abx_02a
cp_86
cp_73
cp_59
cp_44
cp_19
cp_01
abx_15b
abx_14a
abx_04b
abx_01a
cp_72
cp_85
cp_58
cp_43
cp_35
cp_18
cp_71
abx_14b
abx_13a
abx_03b
cp_57
cp_42
cp_34
cp_84
cp_17
cp_56
abx_20b
abx_21a
abx_13b
abx_12a
abx_02b
cp_83
cp_70
cp_41
cp_33
cp_69
cp_55
abx_19b
abx_20a
abx_12b
abx_11a
abx_01b
cp_16
cp_82
cp_32
abx_19a
abx_18b
abx_11b
abx_10a
abx_08a
cp_81
cp_68
cp_54
cp_15
cp_31
abx_17b
abx_18a
abx_10b
abx_09a
abx_07a
cp_80
cp_53
cp_14
cp_30
cp_67
abx_17a
BUGS_1
abx_09b
abx_08b
abx_06a
cp_79
cp_66
cp_52
cp_13
cp_29
CAMHB_2
BUGS_2
abx_21b
abx_16b
abx_16a
abx_07b
abx_05a
cp_78
cp_65
cp_51
cp_12
cp_28
CAMHB_1

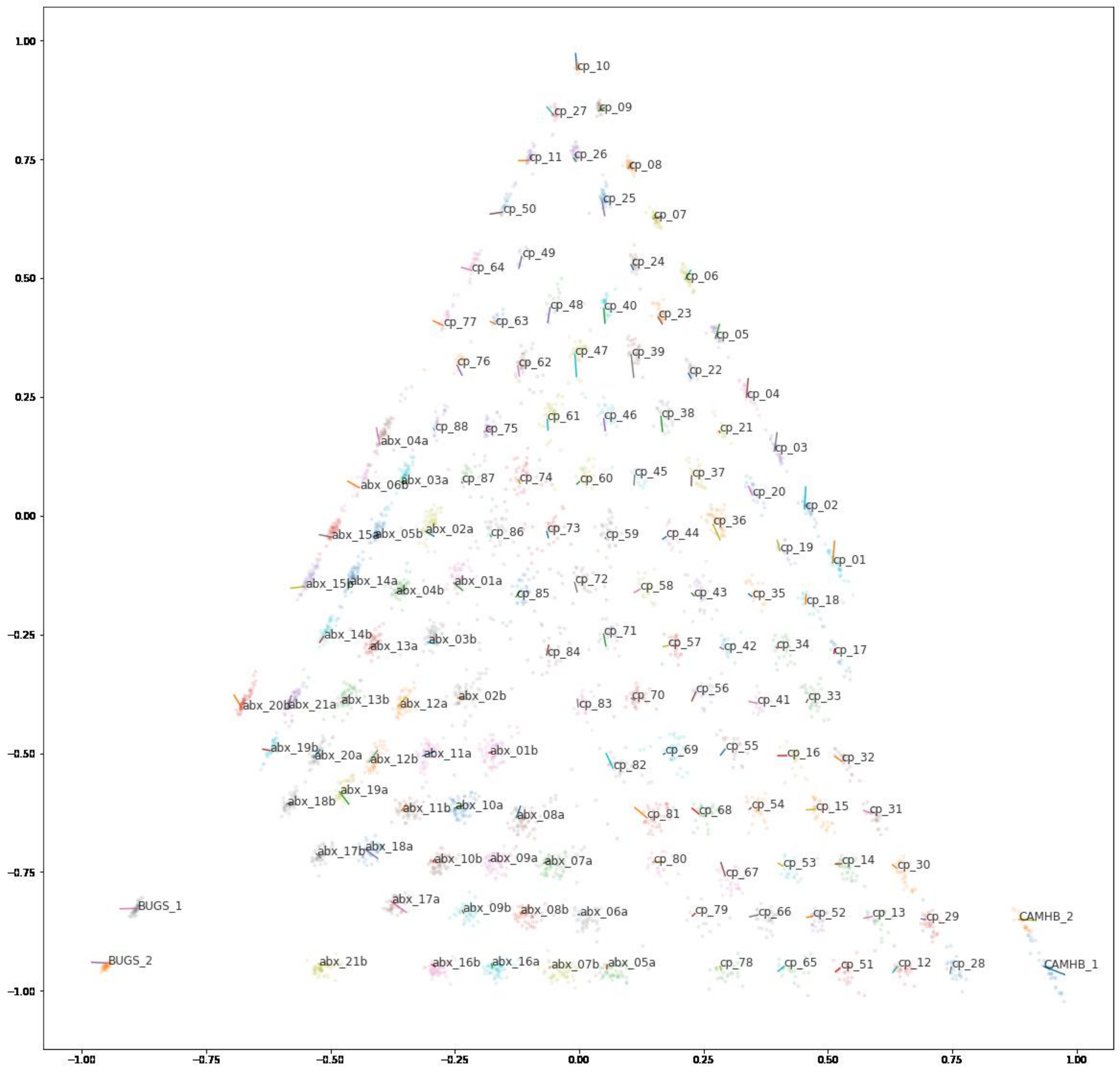

20211229_ab1_cpp1 - abx-abx null distribution
0.30
0.25
0.20
0.15
0.10
0.05
0.00
−4
−2
0
2
4
fitted data
empirical data


cp_10
cp_27 cp_09
cp_11 cp_26 cp_08
cp_50 cp_25 cp_07
cp_64 cp_49 cp_24 cp_06
cp_77 cp_63 cp_48 cp_40 cp_23 cp_05
cp_76 cp_62 cp_47 cp_39 cp_22 cp_04
abx_04a cp_88 cp_75 cp_61 cp_46 cp_38 cp_21 cp_03
abx_06a abx_03a cp_87 cp_74 cp_60 cp_45 cp_37 cp_20 cp_02
abx_15a abx_05a abx_02a cp_86 cp_73 cp_59 cp_44 cp_36 cp_19 cp_01
abx_15b abx_14a abx_04b abx_01a cp_85 cp_72 cp_58 cp_43 cp_35 cp_18
abx_14b abx_13a abx_03b cp_84 cp_71 cp_57 cp_42 cp_34 cp_17
abx_20b abx_21a abx_13b abx_12a abx_02b cp_83 cp_70 cp_56 cp_41 cp_33
abx_19b abx_20a abx_12b abx_11a abx_01b cp_82 cp_69 cp_55 cp_16 cp_32
abx_18b abx_19a abx_11b abx_10a abx_08a cp_81 cp_68 cp_54 cp_15 cp_31
abx_17b abx_18a abx_10b abx_09a abx_07a cp_80 cp_67 cp_53 cp_14 cp_30
BUGS_1 abx_17a abx_09b abx_08b abx_06a cp_79 cp_66 cp_52 cp_13 cp_29 CAMHB_2
BUGS_2 abx_21b abx_16a abx_16b abx_07b abx_05a cp_78 cp_65 cp_51 cp_12 cp_28 CAMHB_1
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00

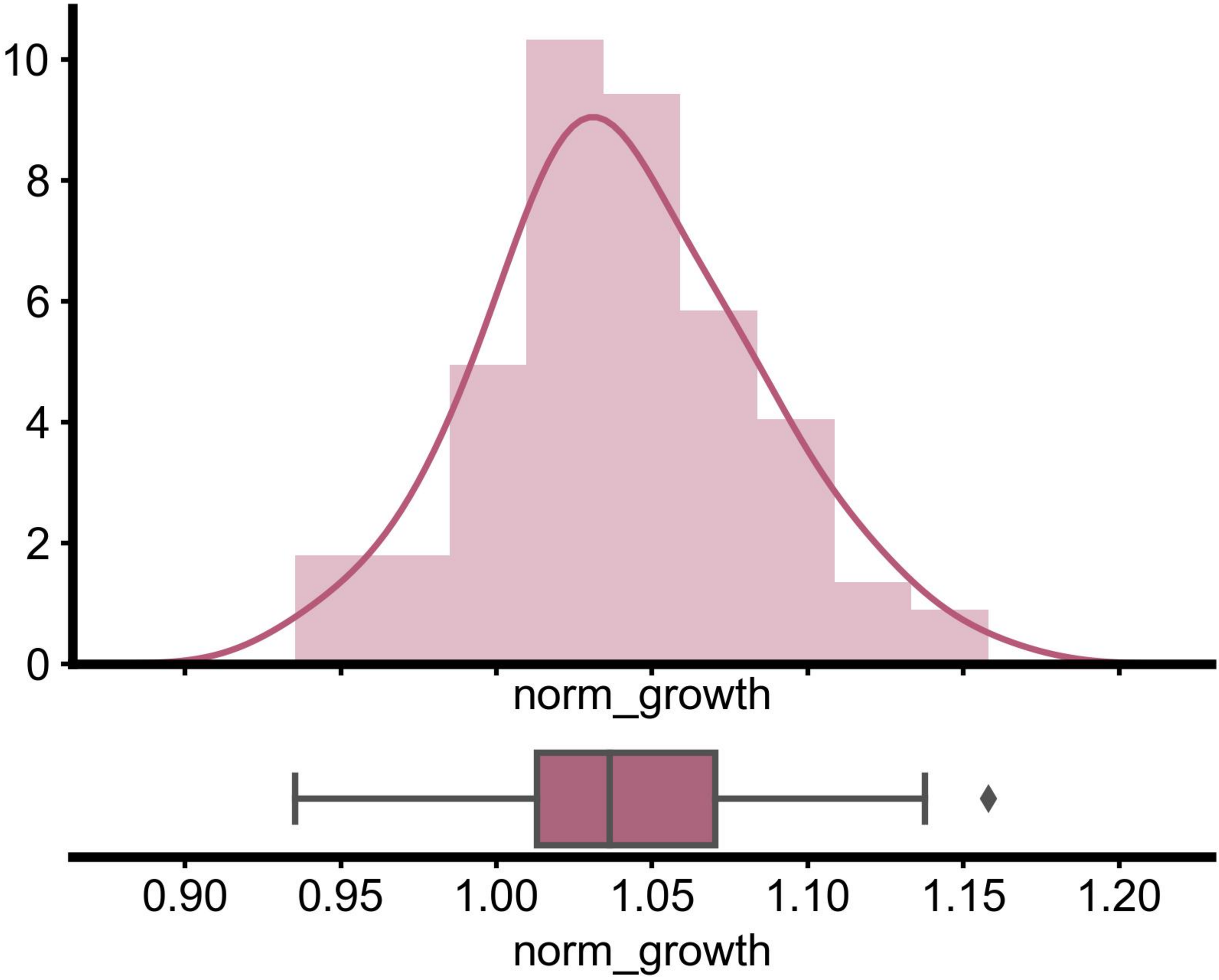

20211229_ab1_cpp1 - abx-cp normalized growth
abx_name_conc
AMK_a
AMP_a
AZI_a
BAC_a
CEP_a
CHLOR_a
CLIN_a
COLIS_a
CYC_a
DAP_a
FOS_a
IMP_a
LEVO_a
MET_a
NOV_a
RIF_a
SFA_a
SUL_a
TIGE_a
TRIM_a
VANC_a
CAMHB_1
DT2012-0252946
DT2012-0254553
DT2012-0254949
DT2012-0255173
DT2012-0255452
DT2012-0255773
DT2012-0256205
DT2012-0256333
DT2012-0256384
DT2012-0256835
DT2012-0257176
DT2012-0257512
DT2012-0257760
DT2012-0257983
DT2012-0258145
DT2012-0258232
DT2012-0258441
DT2012-0258775
DT2012-0258987
DT2012-0259306
DT2012-0259577
DT2012-0259749
Label_right
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2

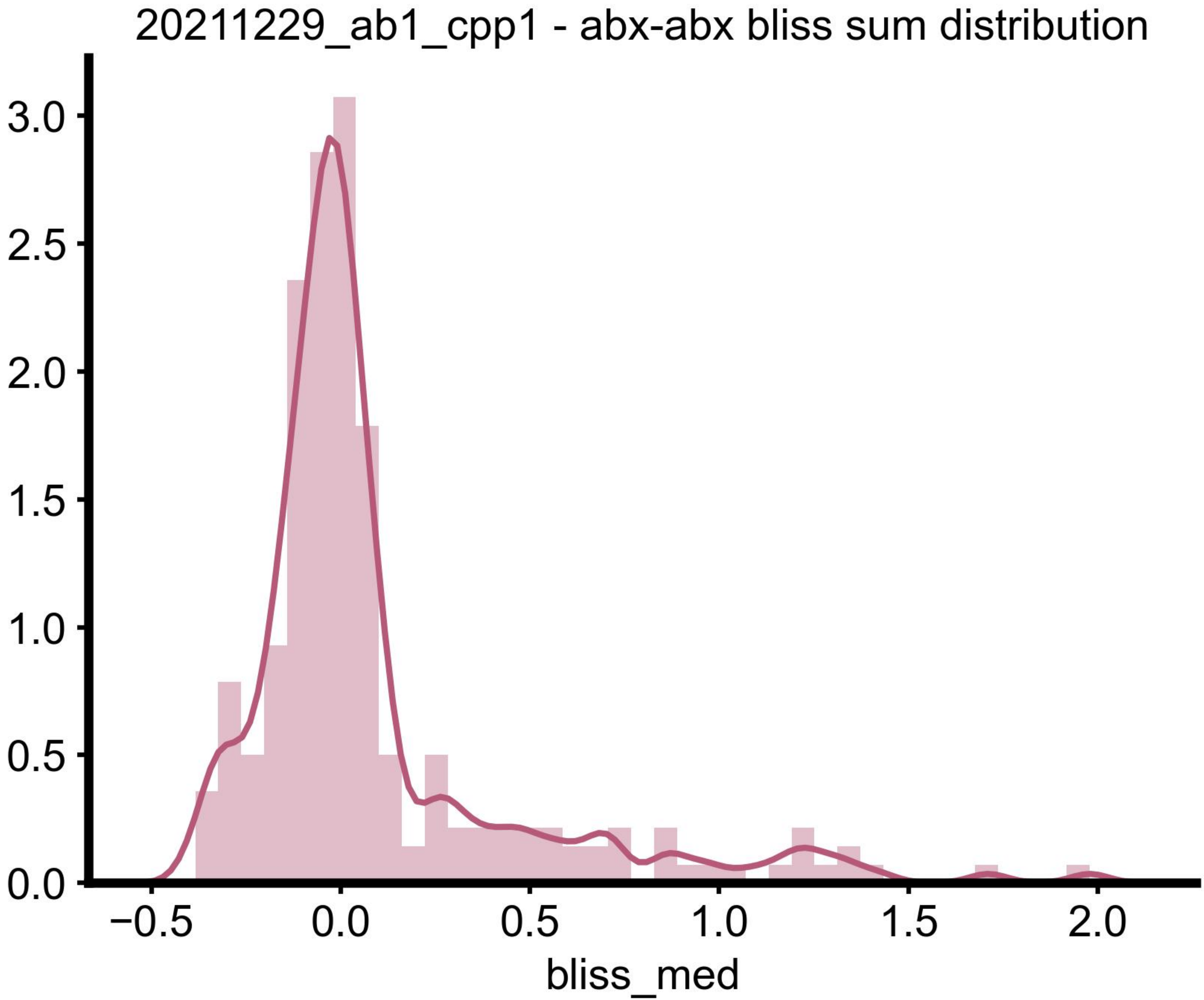

20211229_ab1_cpp1 - abx-cp counts
abx_name_conc
AMK_a
AMP_a
AZI_a
BAC_a
CEP_a
CHLOR_a
CLIN_a
COLIS_a
CYC_a
DAP_a
FOS_a
IMP_a
LEVO_a
MET_a
NOV_a
RIF_a
SFA_a
SUL_a
TIGE_a
TRIM_a
VANC_a
CAMHB_1
DT2012-0252946
DT2012-0254553
DT2012-0254949
DT2012-0255173
DT2012-0255452
DT2012-0255773
DT2012-0256205
DT2012-0256333
DT2012-0256384
DT2012-0256835
DT2012-0257176
DT2012-0257512
DT2012-0257760
DT2012-0257983
DT2012-0258145
DT2012-0258232
DT2012-0258441
DT2012-0258775
DT2012-0258987
DT2012-0259306
DT2012-0259577
DT2012-0259749
Label_right
30
25
20
15
10
5


Counts - prefilter
3000
2500
2000
1500
1000
abx_01a
abx_10a
abx_01b
abx_07a
abx_08a
abx_02b
abx_09a
cp_73
abx_04b
abx_11a
abx_05a
abx_12a
abx_02a
abx_07b
abx_06a
abx_21a
abx_04a
abx_20a
abx_03a
abx_03b
abx_13a
cp_85
abx_05b
cp_86
abx_14a
abx_15a
abx_10b
abx_08b
abx_16a
abx_12b
abx_09b
abx_21b
abx_13b
abx_16b
abx_11b
abx_14b
abx_18a
BUGS_2
abx_20b
BUGS_1
cp_74
abx_15b
abx_17a
abx_19a
cp_72
abx_18b
abx_17b
abx_06b
cp_84
abx_19b
cp_60
CAMHB_1
cp_82
cp_37
cp_81
cp_83
cp_59
cp_70
cp_61
cp_71
cp_57
cp_36
cp_12
cp_87
cp_34
cp_15
cp_30
cp_33
cp_67
cp_69
cp_28
cp_35
cp_14
cp_53
cp_29
cp_58
cp_03
cp_13
cp_38
cp_11
cp_04
cp_31
cp_68
cp_75
cp_65
cp_09
cp_39
cp_25
cp_88
cp_10
cp_76
cp_05
cp_06
cp_56
cp_54
cp_40
cp_62
cp_66
cp_26
cp_07
cp_55
cp_20
cp_41
cp_63
cp_02
cp_80
cp_78
cp_43
cp_77
cp_64
cp_16
cp_32
CAMHB_2
cp_42
cp_01
cp_23
cp_52
cp_47
cp_08
cp_51
cp_46
cp_17
cp_21
cp_45
cp_44
cp_22
cp_27
cp_19
cp_48
cp_49
cp_50
cp_24
cp_18
cp_79

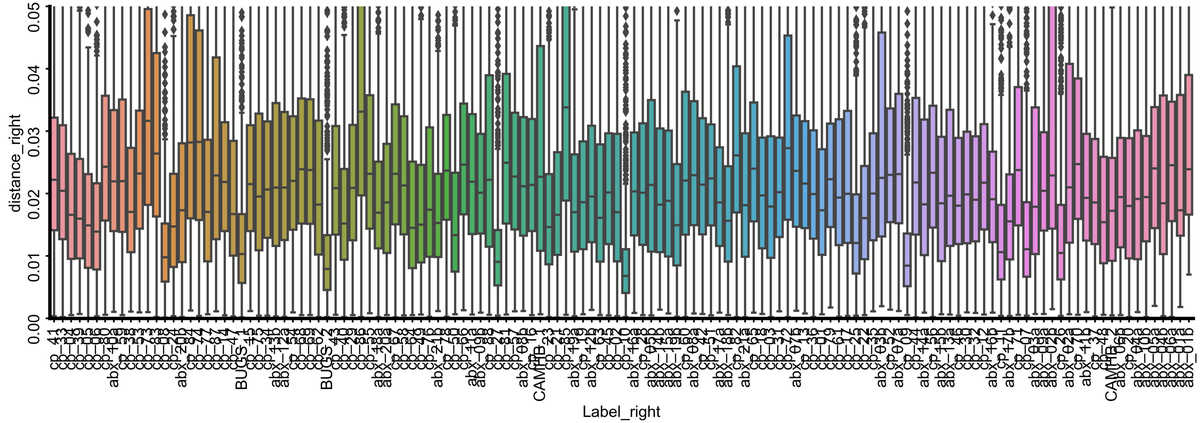

1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
cp_10
cp_27
cp_09
cp_11
cp_26
cp_08
cp_25
cp_50
cp_07
cp_49
cp_64
cp_24
cp_06
cp_48
cp_40
cp_23
cp_77
cp_63
cp_05
cp_47
cp_39
cp_76
cp_62
cp_22
cp_04
cp_61
cp_46
cp_38
cp_88
cp_75
cp_21
abx_04a
cp_03
cp_45
cp_37
abx_06b
abx_03a
cp_87
cp_74
cp_60
cp_20
cp_02
cp_36
abx_15a
abx_05b
abx_02a
cp_86
cp_73
cp_59
cp_44
cp_19
cp_01
abx_15b
abx_14a
abx_01a
cp_72
cp_58
abx_04b
cp_85
cp_43
cp_35
cp_18
cp_71
abx_14b
abx_03b
cp_57
cp_42
cp_34
abx_13a
cp_84
cp_17
cp_56
abx_02b
cp_70
abx_20b
abx_21a
abx_13b
abx_12a
cp_83
cp_41
cp_33
cp_69
cp_55
abx_19b
abx_20a
abx_12b
abx_11a
abx_01b
cp_16
cp_32
cp_82
abx_19a
abx_18b
abx_11b
abx_10a
abx_08a
cp_81
cp_68
cp_54
cp_15
cp_31
abx_17b
abx_18a
abx_10b
abx_09a
abx_07a
cp_80
cp_53
cp_14
cp_30
cp_67
abx_17a
BUGS_1
abx_09b
abx_08b
abx_06a
cp_79
cp_66
cp_52
cp_13
cp_29
CAMHB_2
BUGS_2
abx_21b
abx_16b
abx_16a
abx_07b
abx_05a
cp_78
cp_65
cp_51
cp_12
cp_28
CAMHB_1

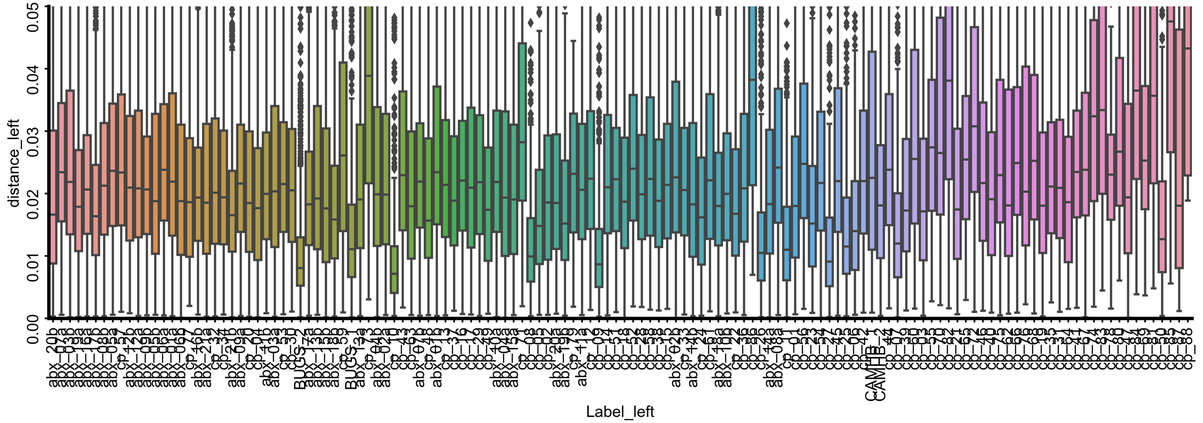
20211229_ab1_cpp1 - compound only activity

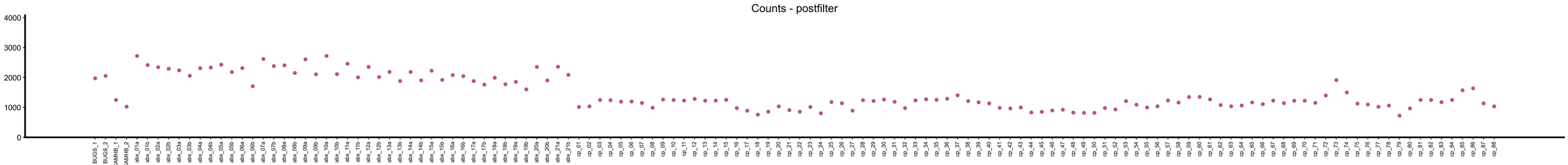


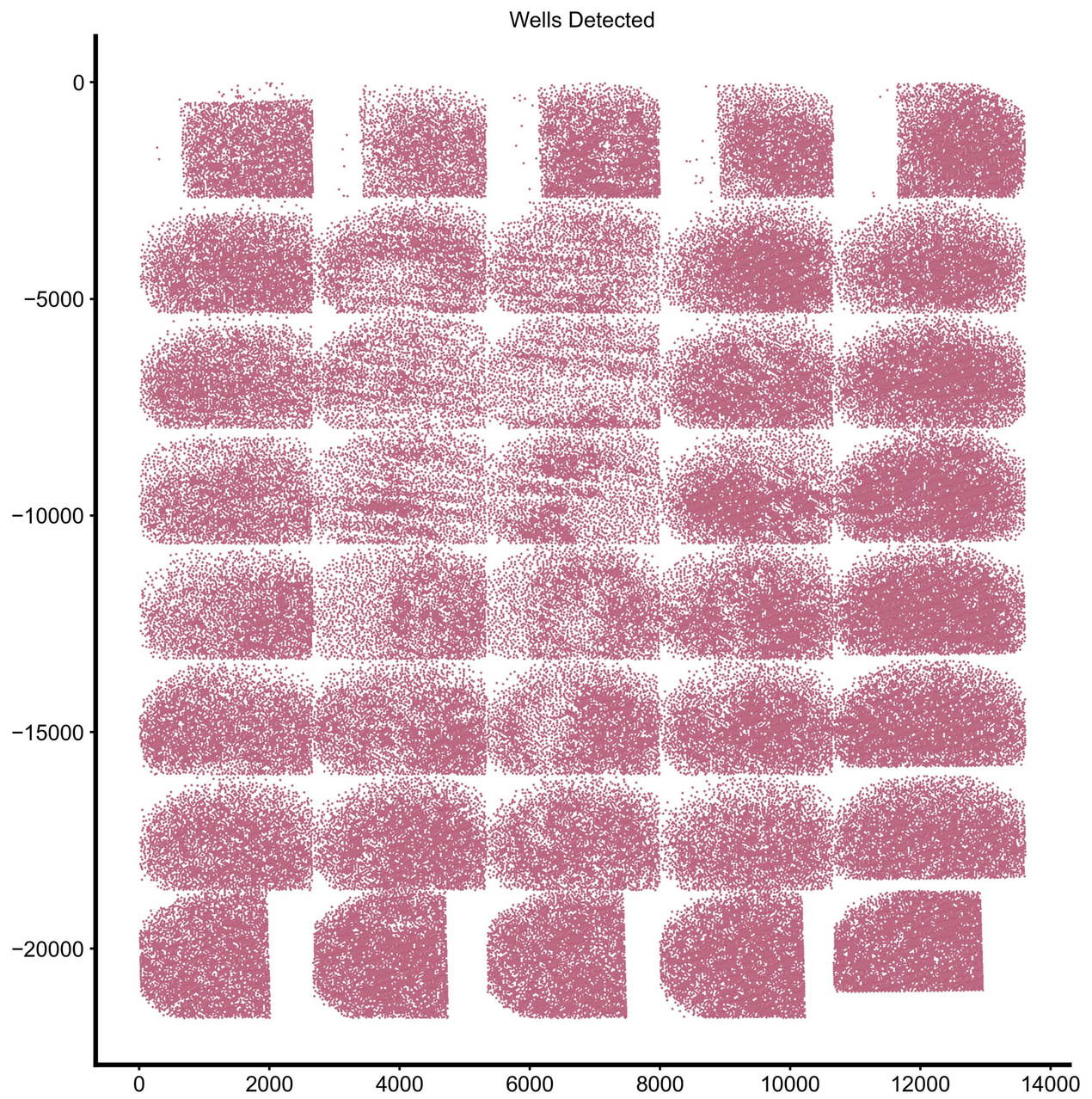

20211229_ab1_cpp1 - abx-abx bliss sum distribution
3.0
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
0.0
0.5
1.0
1.5
2.0
bliss_med

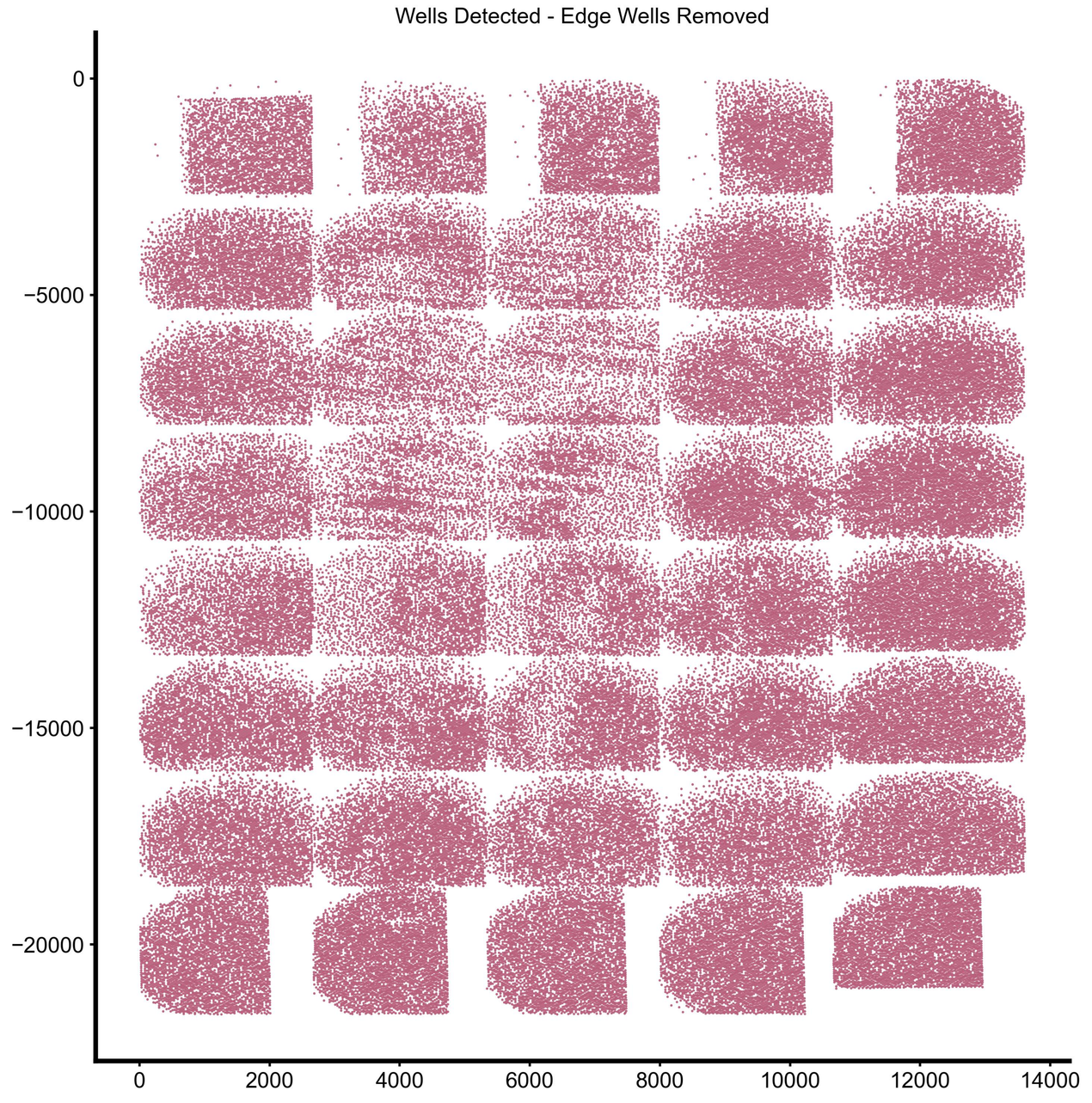
Barcode distances: untrimmed

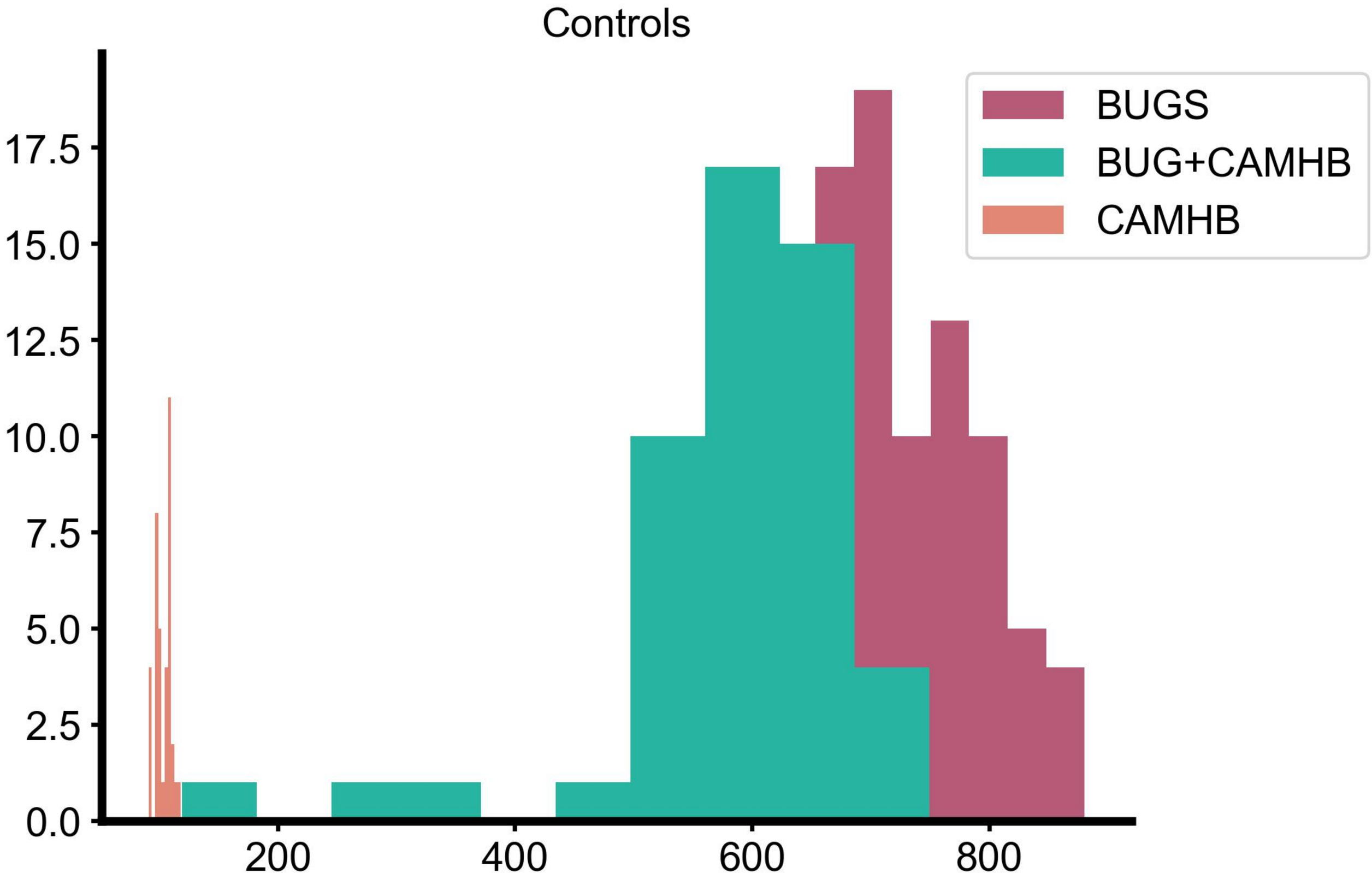


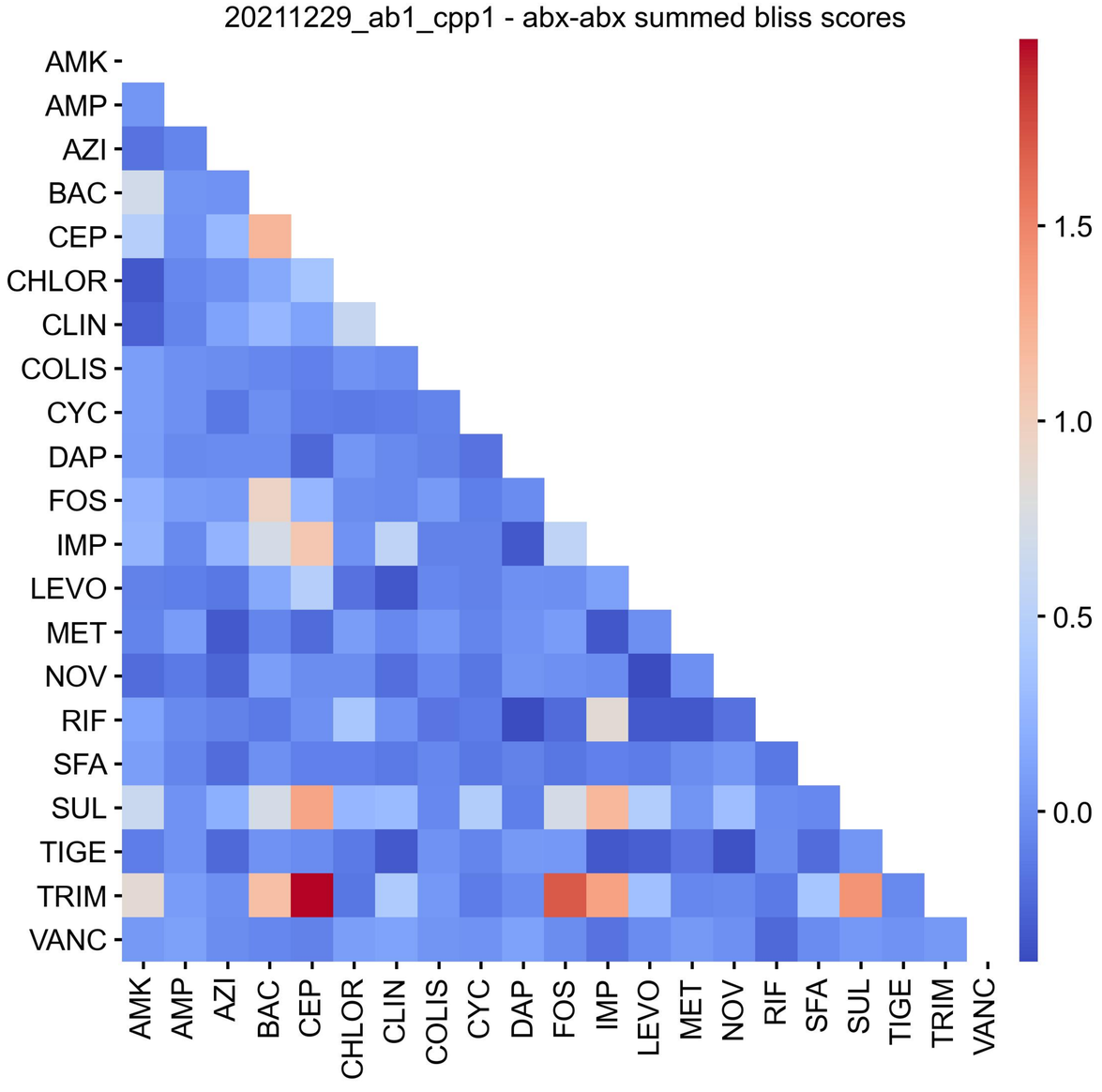


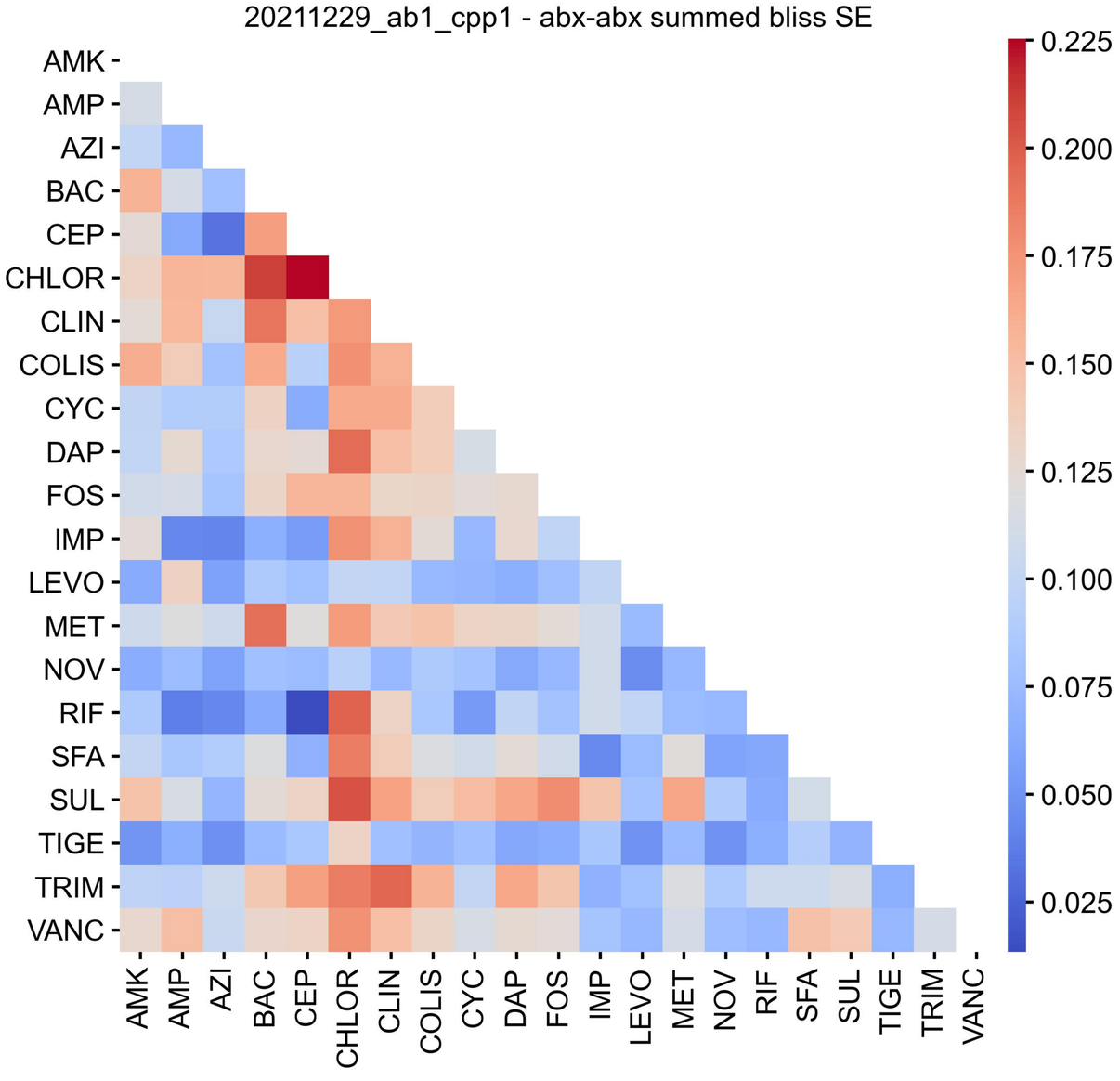

Counts - postfilter
4000
3000
2000
1000
0
BUGS_1
BUGS_2
CAMHB_1
CAMHB_2
abx_01a
abx_01b
abx_02a
abx_02b
abx_03a
abx_03b
abx_04a
abx_04b
abx_05a
abx_05b
abx_06a
abx_06b
abx_07a
abx_07b
abx_08a
abx_08b
abx_09a
abx_09b
abx_10a
abx_10b
abx_11a
abx_11b
abx_12a
abx_12b
abx_13a
abx_13b
abx_14a
abx_14b
abx_15a
abx_15b
abx_16a
abx_16b
abx_17a
abx_17b
abx_18a
abx_18b
abx_19a
abx_19b
abx_20a
abx_20b
abx_21a
abx_21b
cp_01
cp_02
cp_03
cp_04
cp_05
cp_06
cp_07
cp_08
cp_09
cp_10
cp_11
cp_12
cp_13
cp_14
cp_15
cp_16
cp_17
cp_18
cp_19
cp_20
cp_21
cp_22
cp_23
cp_24
cp_25
cp_26
cp_27
cp_28
cp_29
cp_30
cp_31
cp_32
cp_33
cp_34
cp_35
cp_36
cp_37
cp_38
cp_39
cp_40
cp_41
cp_42
cp_43
cp_44
cp_45
cp_46
cp_47
cp_48
cp_49
cp_50
cp_51
cp_52
cp_53
cp_54
cp_55
cp_56
cp_57
cp_58
cp_59
cp_60
cp_61
cp_62
cp_63
cp_64
cp_65
cp_66
cp_67
cp_68
cp_69
cp_70
cp_71
cp_72
cp_73
cp_74
cp_75
cp_76
cp_77
cp_78
cp_79
cp_80
cp_81
cp_82
cp_83
cp_84
cp_85
cp_86
cp_87
cp_88

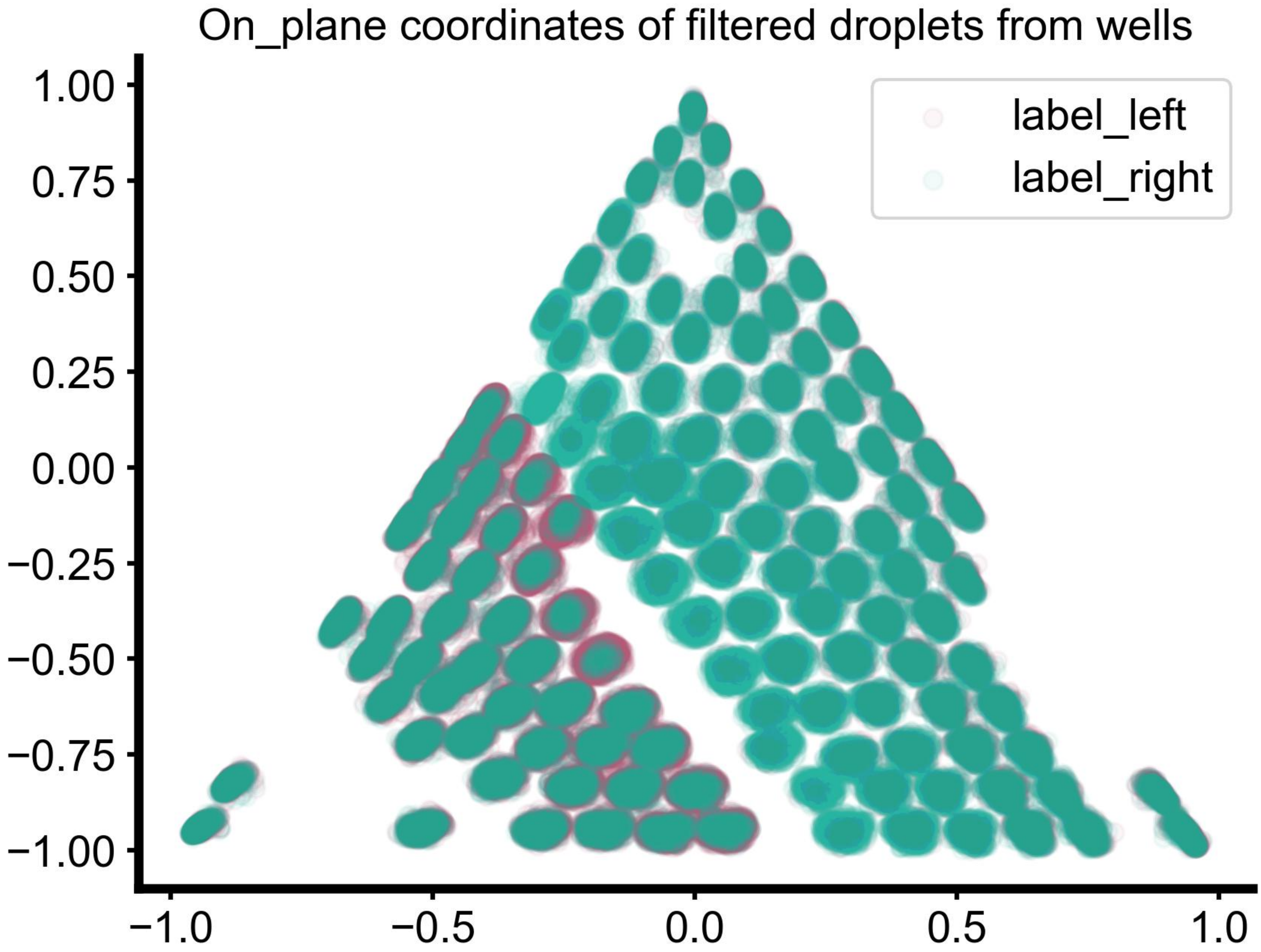

Wells Detected
0
−5000
−10000
−15000
−20000
0
2000
4000
6000
8000
10000
12000
14000

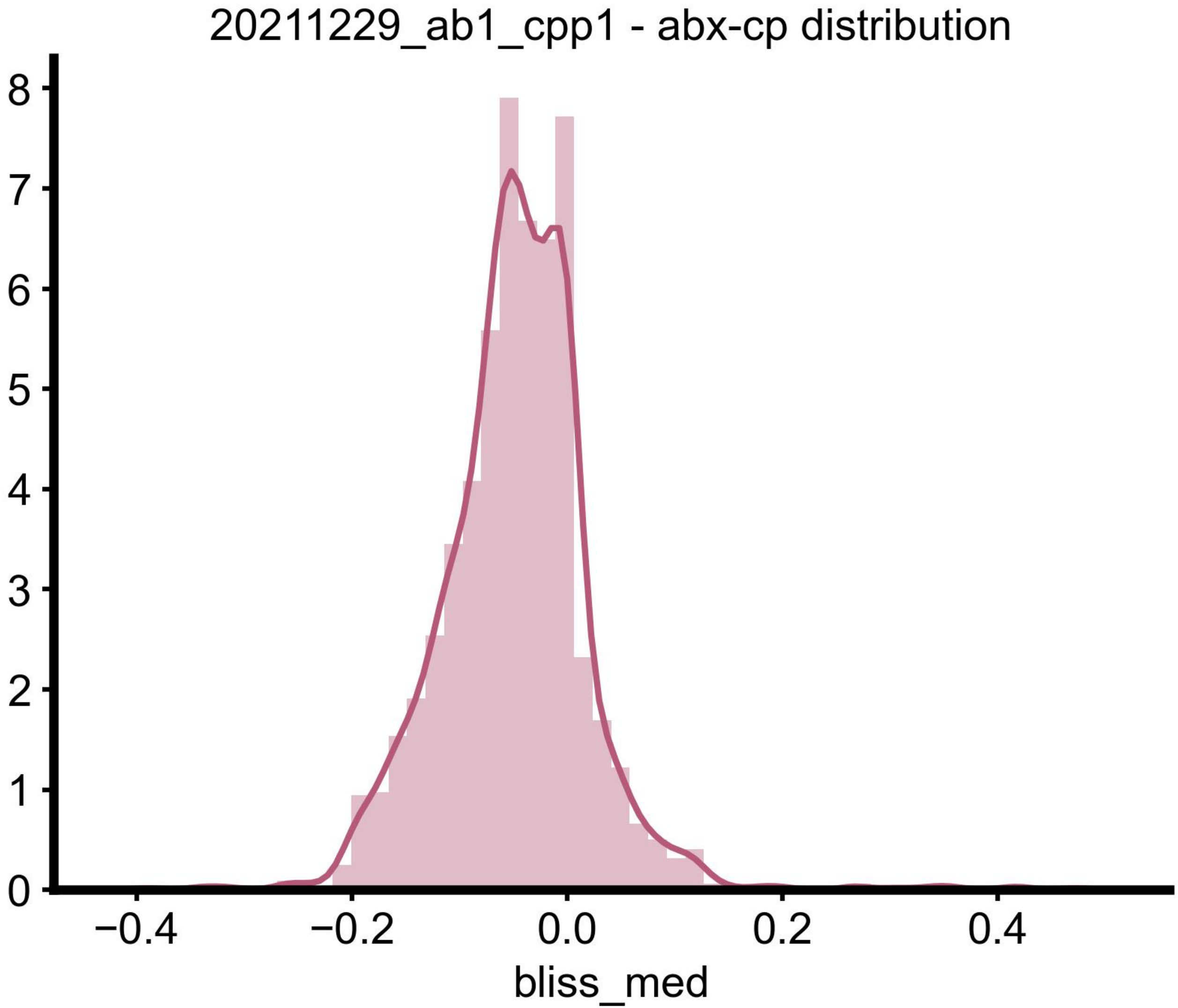

Wells Detected - Edge Wells Removed
0
−5000
−10000
−15000
−20000
0
2000
4000
6000
8000
10000
12000
14000

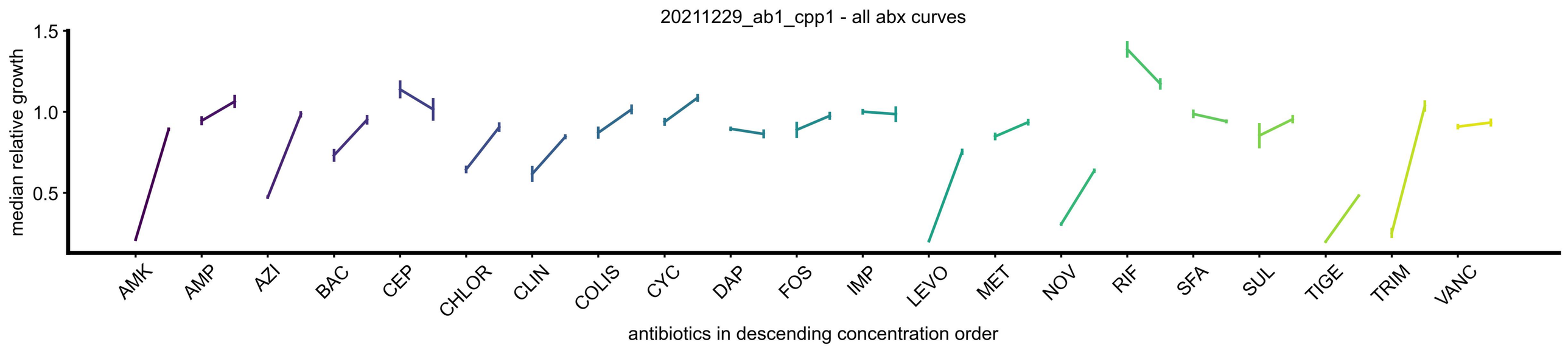

Controls
BUGS
BUG+CAMHB
CAMHB
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
200
400
600
800

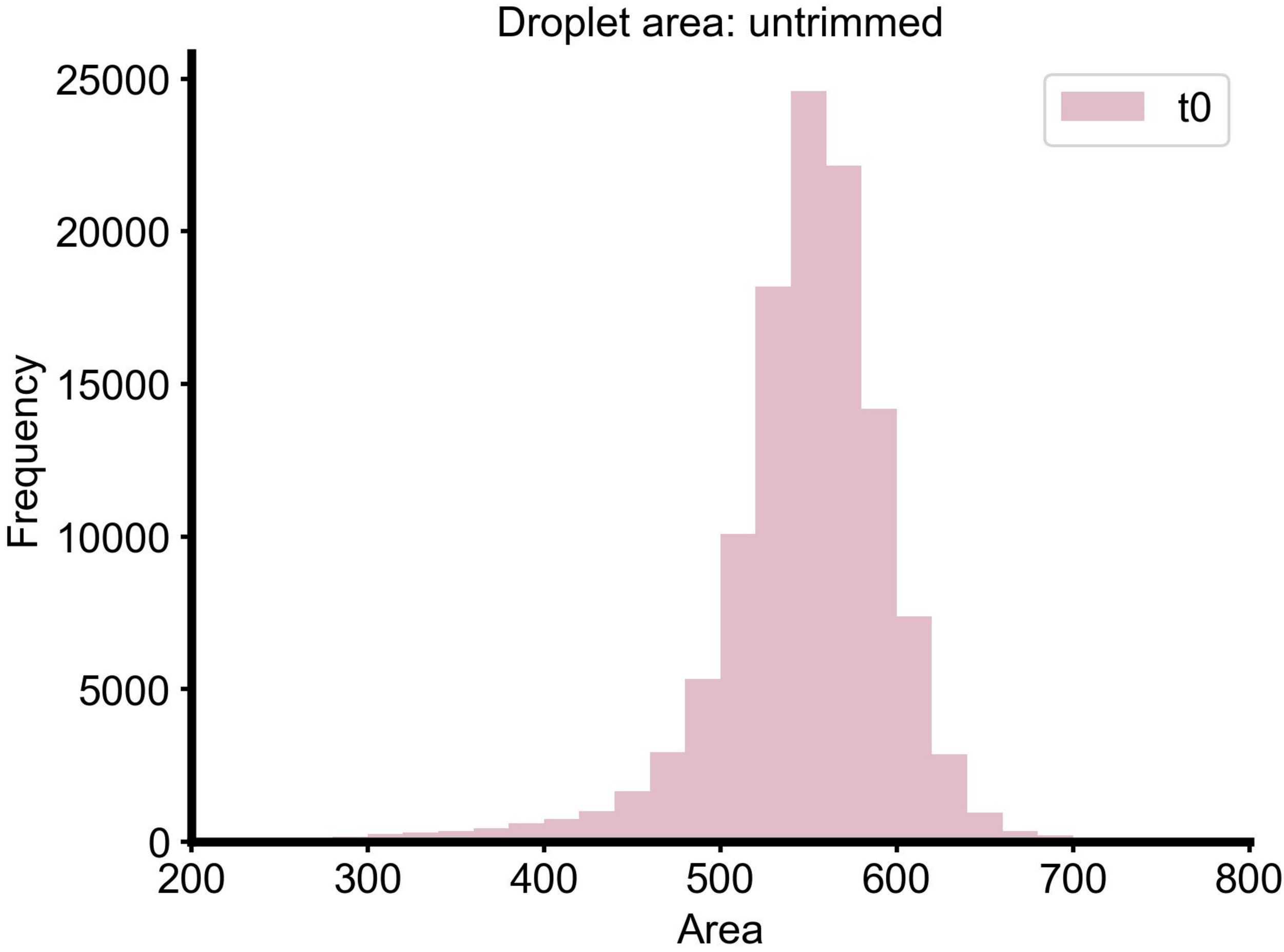

20211229_ab1_cpp1 - abx-abx summed bliss scores
AMK
AMP
AZI
BAC
CEP
CHLOR
CLIN
COLIS
CYC
DAP
FOS
IMP
LEVO
MET
NOV
RIF
SFA
SUL
TIGE
TRIM
VANC
1.5
1.0
0.5
0.0

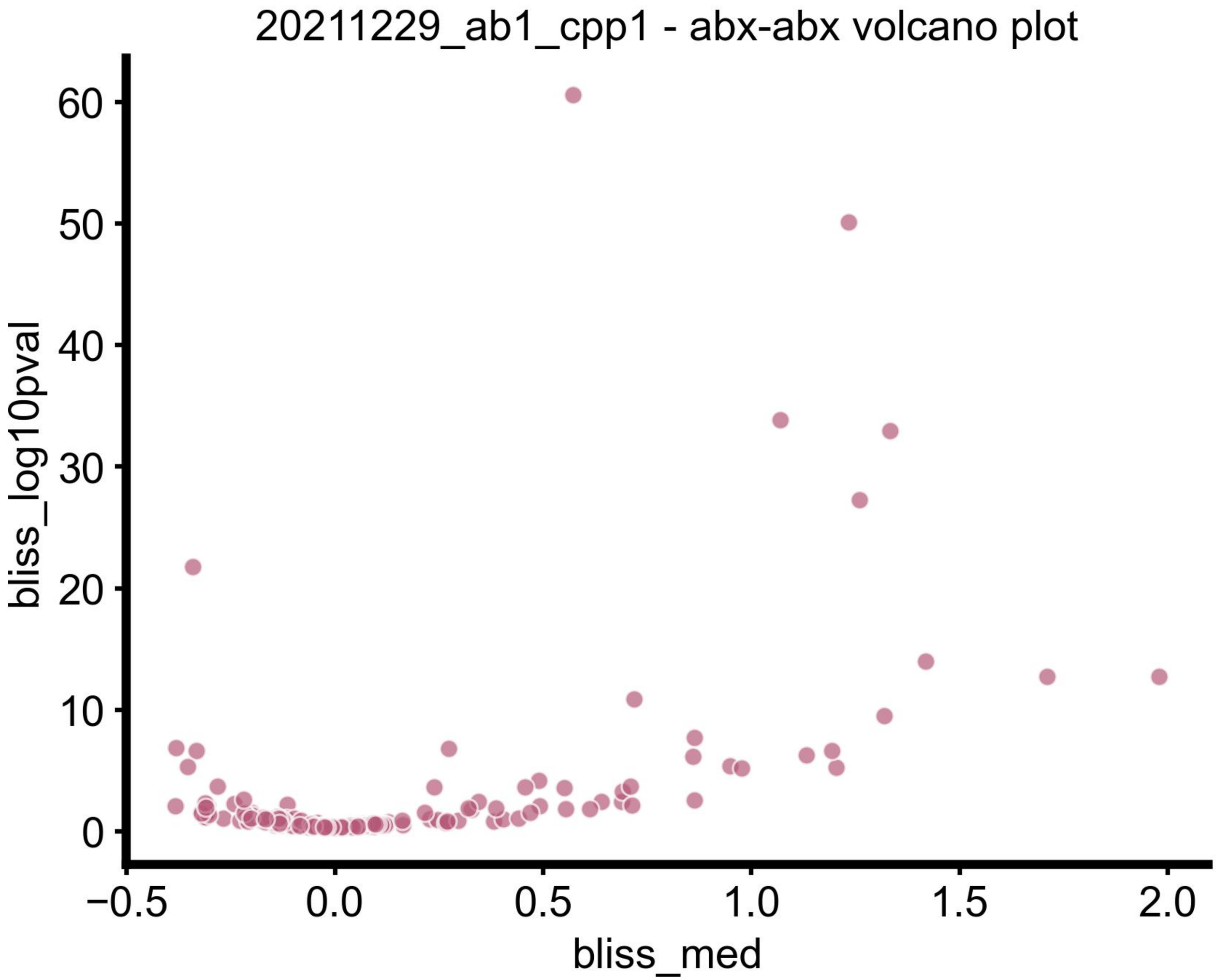

20211229_ab1_cpp1 - abx-abx summed bliss SE
AMK
AMP
AZI
BAC
CEP
CHLOR
CLIN
COLIS
CYC
DAP
FOS
IMP
LEVO
MET
NOV
RIF
SFA
SUL
TIGE
TRIM
VANC
0.225
0.200
0.175
0.150
0.125
0.100
0.075
0.050
0.025

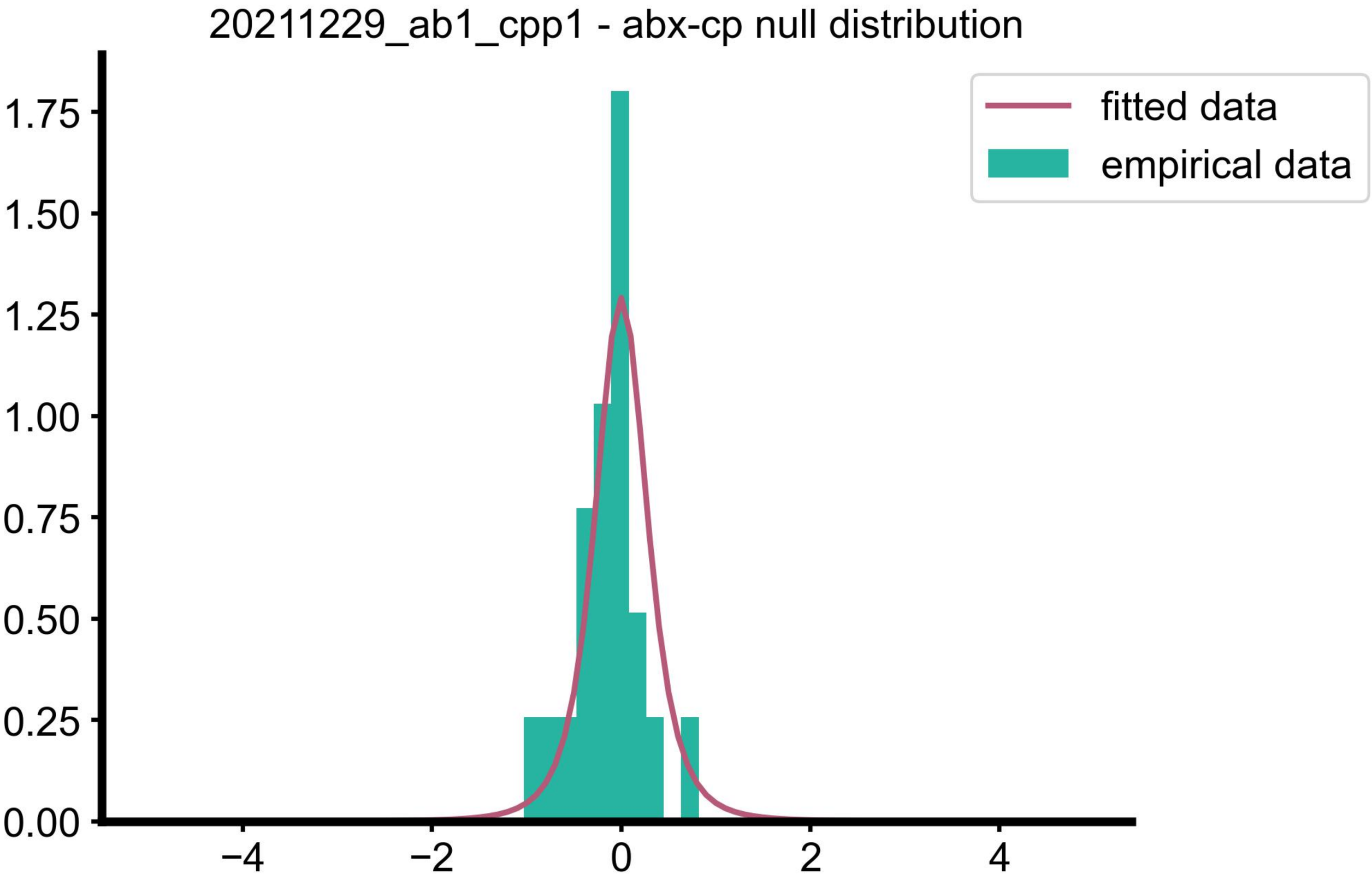

On_plane coordinates of filtered droplets from wells
label_left
label_right
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.0
−0.5
0.0
0.5
1.0


20211229_ab1_cpp1 - abx-cp distribution
8
7
6
5
4
3
2
1
0
−0.4
−0.2
0.0
0.2
0.4
bliss_med


20211229_ab1_cpp1 - all abx curves
median relative growth
1.5
1.0
0.5
AMK
AMP
AZI
BAC
CEP
CHLOR
CLIN
COLIS
CYC
DAP
FOS
IMP
LEVO
MET
NOV
RIF
SFA
SUL
TIGE
TRIM
VANC
antibiotics in descending concentration order


Droplet area: untrimmed
t0
Frequency
25000
20000
15000
10000
5000
0
200
300
400
500
600
700
800
Area


20211229_ab1_cpp1 - abx-abx volcano plot
bliss_log10pval
60
50
40
30
20
10
0
−0.5
0.0
0.5
1.0
1.5
2.0
bliss_med


20211229_ab1_cpp1 - abx-cp null distribution
fitted data
empirical data
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
−4
−2
0
2
4