

A Custom Panel for Profiling Microglia Gene Expression

Phani Sankar Potru ¹, Natascha Vidovic ¹, Susanne Wiemann ¹, Tamara Ruß ¹, Marcel Trautmann ², and Björn Spittau ¹

Supplementary data:

(a)

Names	total	elements
Adult MG vs BV2_Up_AdultMG vs BMMn_Up	62	Nmp3 P2ry13 Cx3 Crd8 Nodc2 C3Ar1 Siglec-H Casp4 I13 Forl1 Cd9 Cd33 I3 Casq4 Tyrobp I27 P2ry4 Tgfb3 Bmp7 I6 Cd2 I18 Bm1 Cxrl1 Gpr24 Tgb3 Cx3 Cr1 Picalm Ntnf Mtf3 Tmem19 I10Rb Bmp5 I1A I10Ra Sall1 Cx3 Trf2 Hoxb P2ry12 Cd4 Bmp10 Cd33 B2M Cxrl1 Cor6 Gm Pycad C1Qb St6GAL Clec7A Tmem2 Cd8 Olfm3 Bmp10 Cxcl10
AdultMG vs BMMn_Up_AdultMG vs pMG_ Up	8	Tmfsf11 I10 Cat7 Cd9 I17A Cd68 Lpl Cd3
Adult MG vs BV2_Up_AdultMG vs BMMn_Down	34	Tgfb2 Bmp4 Aif1 I17F Cd14 Nlp5 Igav Lamp2 Cnd21 Timp2 Lrp1 Ms4A7 I17 Axl Bmp7 Tfrrsf11B Bmp8B Nodal Lrp6 I18 Sparc Spp12 Mrc1 Nfg Lamp1 Apb3 Cxcl10 Apoe Lthb I15 Tfrrsf10 Gnrh Bmp1 Fgf2
Adult MG vs BV2_Up_AdultMG vs pMG_Down	17	Cd8 Cd74 Tgfb1 Cd3 C5Ar1 Apoc2 Pfk2B Cd22 Rn3 Ms4A4C Ccr2 Sor1 I12A I16 I15 Plg2 Nrc4
AdultMG vs BMMn_Down	9	Cd2 Rabep1 Gpmmb C16l Ccl7 Spp1 Ctsb Igf1 Csf1
AdultMG vs pMG_Down	3	Slc16A3 Igax Cd72
Adult MG vs BV2_Up	17	Zyx Stat2 Jak1 Pdgfc Tgfb3 Tmsb4X Cxcr4 Bmp6 Stat1 Tgfb3 Bdnf Cxcl5 I1R1 Apoc1 Thbs1 Apobec1 C3

(b)

Names	total	elements
AdultMG vs BMMn_Down	3	Lyz2 Thbs1 C3
AdultMG vs pMG_Down	1	Tfec
Adult MG vs BV2_Down	5	Fabp5 Igf1 Spp1 Gpnmb Mfge8
AdultMG vs BMMn_Down	7	Cxcl4 Zyx Sor1 Cybb I12A Pnca Cd72
AdultMG vs pMG_Down	17	Nfg Bmp6 Tgfb3 Bmp7 Tfrrsf11B Ffh1 Tgfb2 Msr1 Vegfa Timp2 Bdnf Lrp6 Bmp4 Ms4A7 I1R1 Pdgfc
Adult MG vs BV2_Down	7	Nlrp3 Lpl Ccl3 Mif Lirb4 Cd36 Lgals3

(c)

Names	total	elements
BV2 vs BMMn_Up	6	Sall1 Ffh1 C3Ar1 Cd7 Ctsb Ctd
pMG vs BMMn_Up	48	Bmp6 Tgfb3 Bmp7 Tfrrsf11B Tgfb2 Mer1 Cd9 Trf2 Hesb Bdnf Lrp6 Bmp4 I18 Aif1 Sparc Spp12 Ccd2 Forl1 Repk1 Nfg Lamp1 Cxcl10 Tgfb3 Apoe Tgfb2 Ldhb Igav Lamp2 Cxcl2 Cnd2 Timp2 Tfrrsf10 C1Qb Lrp1 Gpr24 Tgfb3 Ms4A7 I17 Gdnf Bmp1 Bmp3 Cx3Cr1 Axl Olfm3 Tmem19 Bmp5 Fgf2
BV2 vs BMMn_Up	17	Fabp5 Ctsb Lirb4 Cd4 Spp1 Cd14 Cd5 Cd2 I17A Igf1 Cd68 Slc2A5 Csf1 Itga5 Trem2 Mfge8 Gpnmb
pMG vs BV2_Up	41	P2Ry13 Cxcr4 I10Ra Stat1 Bmp6 Gnas P2Ry12 Nodal Siglec-H Zyx Sor1 Cxcl5 I17 I12A Cd3 C5Ar1 Cd33 Stat1 I3 Jak1 Mrc1 Cxrl4 I27 Apobec1 Tgfb1 Lyr2 Bmp2 Nlrp5 Apoc1 I5 Nlr4 Thbs1 Pycad Tmsb4X Apobec1 Picalm Bmp10 Ntf3 C3 Cxcl5 I21
pMG vs BMMn_Up	2	I16 Gm
BV2 vs BMMn_Up	13	Nlrp3 Lpl Trf Mif I19 I13 Cd9 Slc16A3 P2Rx7 Cd9 Rabep1 Cd36 Lgals3

(d)

Names	total	elements
BV2 vs BMMn_Down	3	Cd74 Plcg2 Cd72
pMG vs BMMn_Down	6	Tfec Cass4 Slc16A3 Panx1 Clec7A Casp1
BV2 vs BMMn_Down	23	Cxcr4 Cd22 I10Ra Rin3 Cd6 Tgfb1 Ms4A4C Ccr2 Siglec-H Sor1 Cybb I12A Ccr3 Cd33 I116 Tfrrsf11B Pnca Ab3 Apoc2 I1B Pfk2B C3 Cxcl9
pMG vs BV2_Down	18	Nlrp3 Lpl Mif I19 Lirb4 Cd4 Igav Spp1 P2Ry7 Cat7 Ccl9 Cc3 Cd68 Cd36 Mfge8 Gpnmb Lgals3
BV2 vs BMMn_Down	38	P2Ry13 Bmp6 Stat1 Tfrrsf11B Bdnf P2Ry12 Zyx Sparc Cxcl5 C5Ar1 Jak1 Mrc1 I15 I1R1 Pdgfc Nfg I27 Tgfb1 Lyc2 Tgfb2 Bmp2 Tgfb3 Ldhb Apoc1 Nlr4 Pycad Thbs1 C1Qb Tmsb4X Gpr34 Apobec1 Cx3Cr1 Picalm Axl Bmp10 Olfm3 Tmem19 I21

Figure S1: Tables of the with the gene names and the groups compared corresponding to the Venn diagrams.

k-Means Elbow Plot

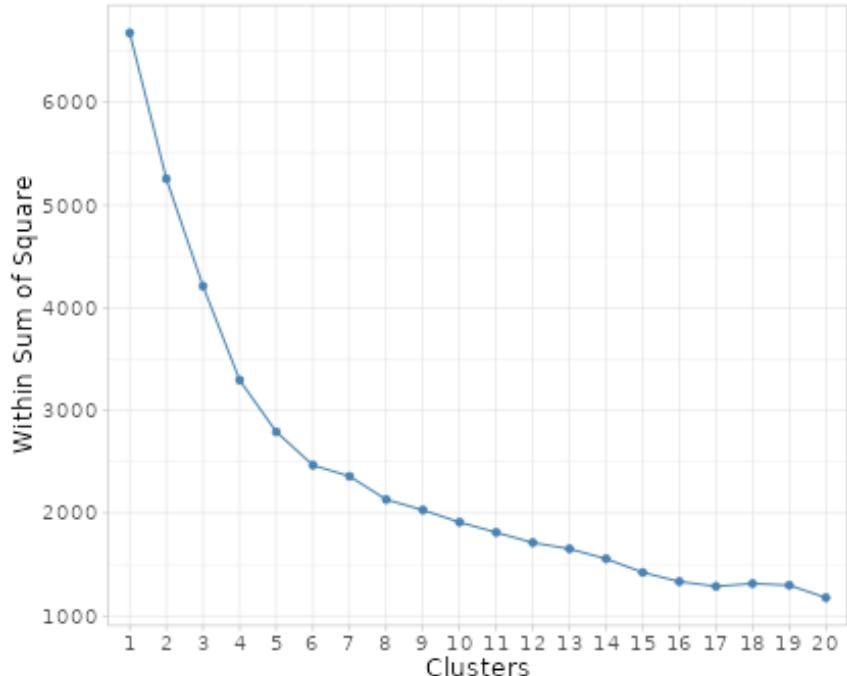


Figure S2:Elbow plot used for determining the number of k-means clusters.