

Supplementary Material

Table S1. Reagent

| Name | Company | Catalog# |
|---------------------|-----------|----------|
| IL-4 | Peprtech | 214-14 |
| GM-CSF | Peprtech | 315-03 |
| Flt3-Ligand | Peprtech | 250-31L |
| CCL21 | Peprtech | 250-13 |
| OVA323-339 peptides | InvivoGen | vac-isq |

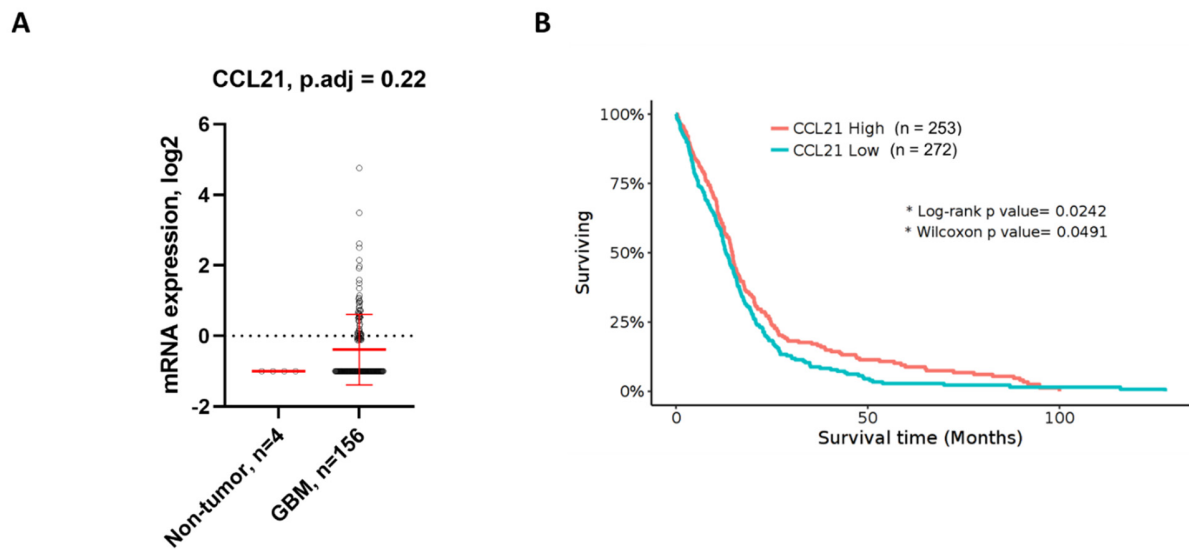
Table S2. Antibody

| Name | Company | Catalog# |
|------------------------|----------------|------------|
| CCL21 | R&D | AF457 |
| CIITA | Novus | NBP2-59072 |
| CIITA | Santa Cruz | sc-376174 |
| β -arrestin | Santa Cruz | sc-74591 |
| CCR7 | R&D | MAB3477 |
| β -actin | Invitrogen | AM4302 |
| LaminB1 | Santa Cruz | sc-374015 |
| Anti-rabbit IgG, HRP | Cell Signaling | 7074 |
| Anti-mouse IgG, HRP | Cell Signaling | 7076 |
| Anti-rabbit IgG, AF488 | Invitrogen | A-11001 |
| Anti-mouse IgG, AF647 | Invitrogen | A-21244 |
| CD3 | Biolegend | 152316 |
| CD45 | Biolegend | 103108 |
| CD11c | Biolegend | 117318 |
| CD4 | Biolegend | 116016 |
| CD8 | Biolegend | 100753 |
| BST2 | Biolegend | 127015 |
| MHC-II | Biolegend | 107648 |
| MHC-I | eBioscience | 11-5998-82 |
| ACKR4 | Invitrogen | PA5-106552 |
| CD80 | Biolegend | 104739 |
| CD86 | Biolegend | 105039 |
| PD-L1 | Biolegend | 124315 |
| TLR9 | Biolegend | 159107 |
| IFN- α | Invitrogen | PA5-119649 |
| IL10 | Biolegend | 505031 |
| TGF β | Biolegend | 141403 |
| Foxp3 | eBioscience | 12-5773-82 |
| Tbet | Biolegend | 644828 |
| ROR γ t | eBioscience | 17-6988-80 |

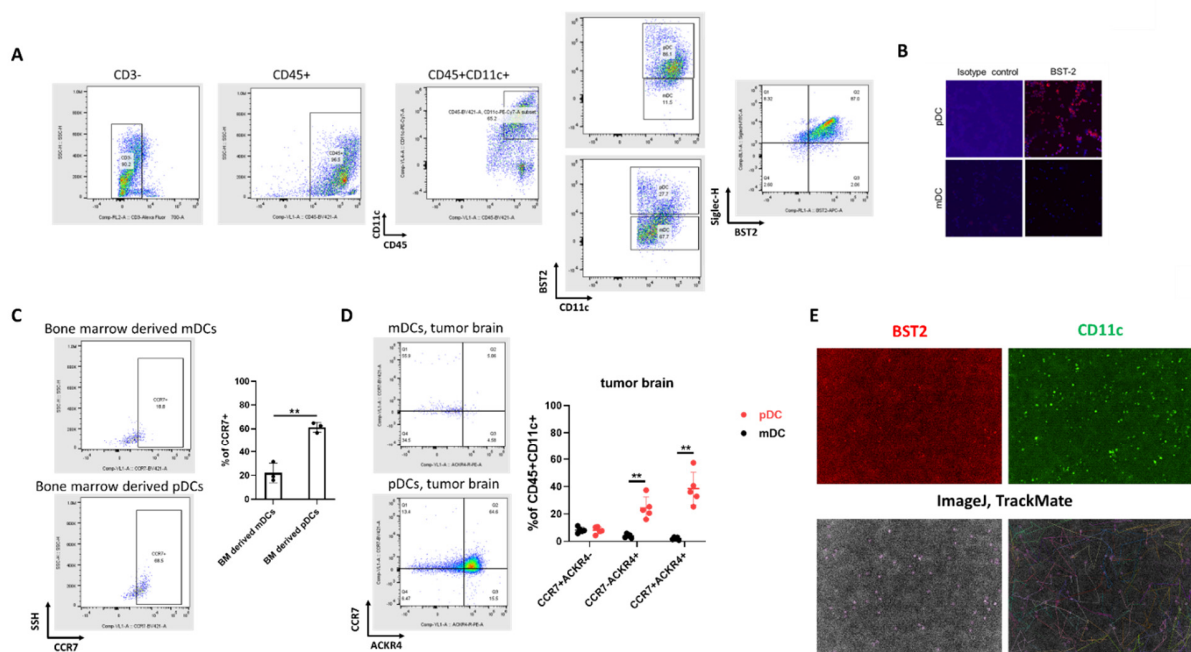
| | | |
|----------|-----------|--------|
| Siglec-H | Biolegend | 129603 |
| CCR7 | Biolegend | 120119 |

Table S3. qPCR primers

| Name | Forward | Reverse |
|----------------|-------------------------|-------------------------|
| GAPDH | CATCACTGCCACCCAGAAGACTG | ATGCCAGTGAGCTTCCCGTTCAG |
| H2-Aa | GTGTGCAGACACAACCTACGAGG | CTGTCACTGAGCAGACCAGAGT |
| H2-Ab1 | GCGACGTGGGCGAGTACC | CATTCCGGAACCAGCGCA |
| H2-Ea | GCTGTGGACAAAGCTAACCTGG | AGGTTTACAGGGCTTCTGGAGA |
| H2-Eb1 | TCCAGTGGCTTTGGTCAGAGAC | CAGGTTCTCCTCCAGGTTGTAG |
| H2-Eb2 | TGCCTCAGTAGACAGGTGCAGA | AGAGCAGACCAGGAGGTTATGG |
| CIITA | ACCTTCGTCAGACTGGCGTTGA | GCCATTGTATCACTCAAGGAGGC |
| CIITA-p1 | AAGAGCTGCTCTCACGGGAAT | GGTCGGCATCACTGTTAAGGA |
| CIITA-p3 | TCTTACCTGCCGGAGTT | GGTCGGCATCACTGTTAAGGA |
| CIITA-p4 | GAGACTGCATGCAGGCAGCA | GGTCGGCATCACTGTTAAGGA |
| β -actin | CATTGCTGACAGGATGCAGAAGG | TGCTGGAAGGTGGACAGTGAGG |
| ACKR4 | CTCACGACTACAGCCAGTACGA | ATCGCCACAACCTACGGAGTTCC |
| IRF7 | CCTCTGCTTTCTAGTGATGCCG | CGTAAACACGGTCTTGCTCCTG |
| MyD88 | ACCTGTGTCTGGTCCATTGCCA | GCTGAGTGCAAACCTGGTCTGG |

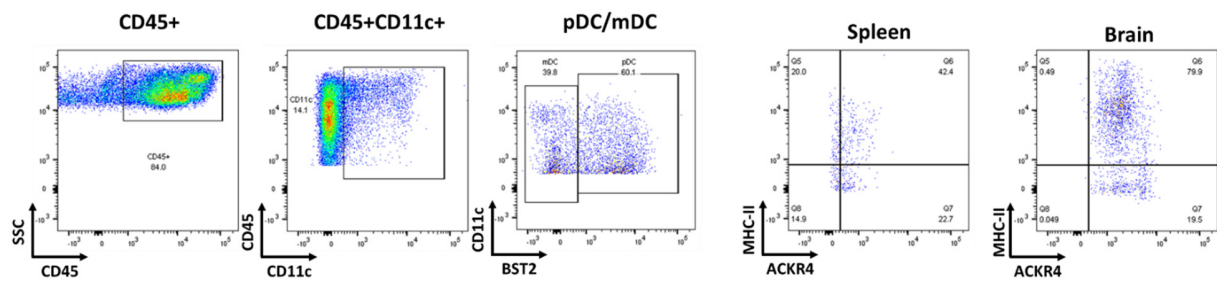


Supplemental Figure S1. Clinical relevance of CCL21 in GBM. In silico analysis of CCL21 mRNA expression and patient survival from GBM RNA-seq data in TCGA patient database.

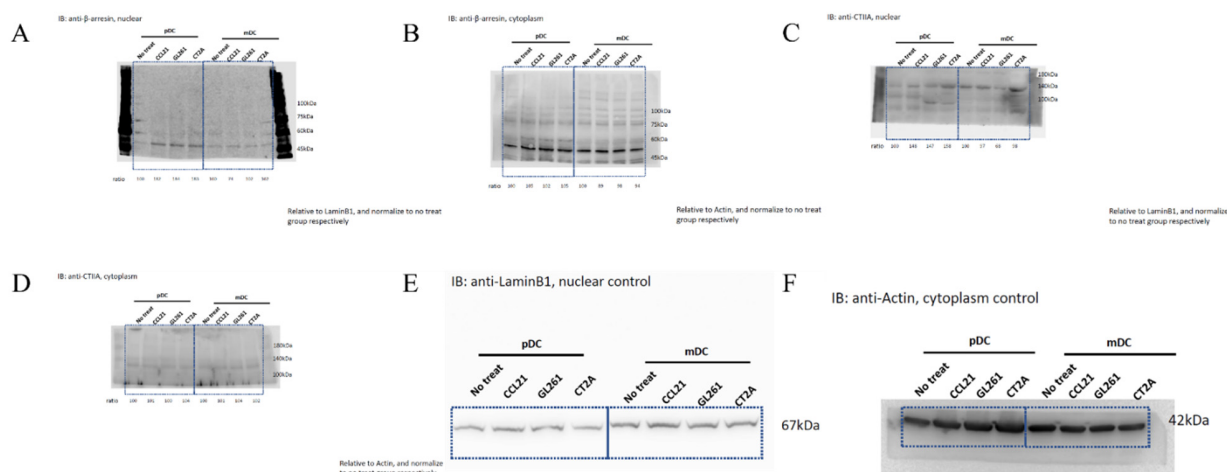


Supplemental Figure S2. Identification of pDCs and mDCs. (a) Flow cytometry gating strategy to identify pDCs and mDCs. (b) Immunocytochemistry staining of BST-2 in pDCs and mDCs. (c) CCR7 expression in Bone marrow derived pDCs and mDCs. (D) CCR7 and ACKR4

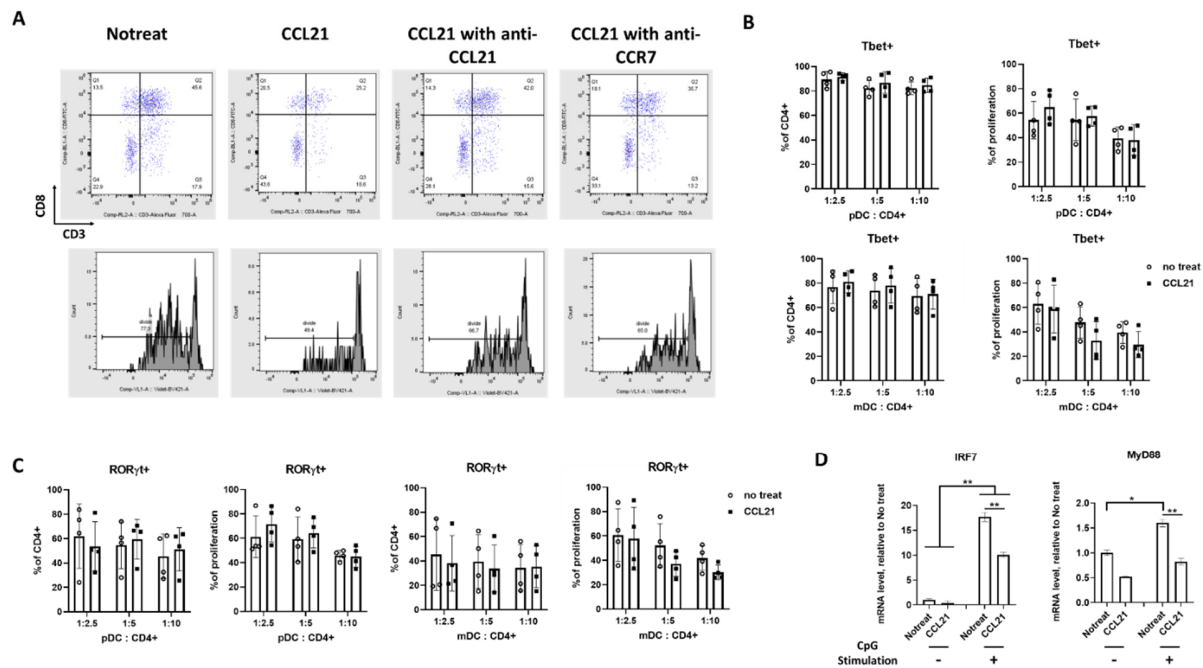
phenotype in mouse tumor bearing brain. (e) IncuCyte migration assay result was analyzed by TrackMate in ImageJ. Representative images were shown here.



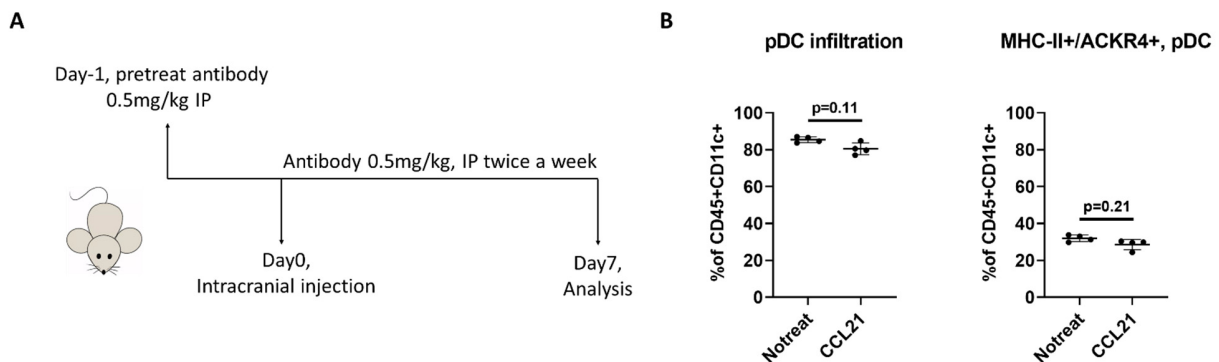
Supplemental Figure S3. ACKR4 expression in pDCs.



Supplemental Figure S4. Original WB images of Figure 4



Supplemental Figure S5. CCL21 treated pDCs does not affect CD4 T cell lineage differentiation. (a) CD8⁺ T cells were co-culture with pretreated pDCs. T cell population and proliferation were analyzed and quantified by flow cytometry. Representative flow plots of are shown. (b) and (c) CD4⁺ naïve T cells were co-culture with pretreated pDCs. Th1/Tbet⁺ and Th2/RORγt⁺ T cell population and proliferation were analyzed and quantified by flow cytometry. (d) IRF7 and MyD88 gene expression in CCL21 pretreated pDCs under CpG stimulation. Data represent mean ± SEM.



Supplemental Figure S6. Therapeutically target CCL21 in GBM mouse model. (a) CCL21 antibody administration strategy. (b) Flow cytometry analysis of pDC infiltration and activation in tumor bearing brain.